Supplementary Information:

A Colorimetric Sensor Array for Identification of Toxic Gases below Permissible Exposure Limits

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Experimental Section:

All reagents used were analytical-reagent grade, obtained from Sigma-Aldrich, and used without further purification unless otherwise specified. Certified, premixed gas tanks, including ammonia, methylamine, dimethylamine, trimethylamine, HCl, SO_2, fluorine, chlorine, phosphine, arsine, phosgene, hydrogen sulfide, hydrogen cyanide, and diborane were obtained from Matheson Tri-Gas Corp. through S. J. Smith, Co. (Urbana, IL).

The nanoporous pigment sensors are given in Table S1. For printing of the sensor array, we prepared sol-gel-colorant solutions by the simple hydrolysis of solutions containing commercially available silane precursors (e.g., tetraethoxysilane, methyltriethoxysilane, phenethyl-trimethoxysilane and octyltriethoxysilane) with a variety of chemically responsive indicators (Table S1). Final organically modified sol-gel formulations with the colorants were loaded into a 36-hole Teflon ink well. Sensor arrays (Fig. S1) were printed using an array of 36 floating slotted pins (which delivered approximately 130 nL each) by dipping into the ink well and transferring to a PET film. Once printed, the arrays were aged under a slow stream of N_2 for at least 3 days before sensing experiments were performed.

Gas streams containing the toxic industrial chemicals at their PEL or lower concentrations were prepared by mixing the prediluted analyte gas stream with dry and wet nitrogen gas. Importantly, gas stream concentrations and relative humidity were confirmed by in-line quantitative analysis using an FTIR multi-gas analyzer, MKS Instruments model 2030. MKS digital mass flow controllers were used to achieve the desired concentrations and relative humidity (Figs. S2 and S5). The serial dilution apparatus (Fig. S5) could produce precise analyte concentrations to ~0.01% of the initial gas tank concentration. For nitric acid and HF, saturated vapors were generated from a diluted solution in a five gallon polyethylene carboy, which was further diluted to PEL concentration with nitrogen gas and confirmed by the multi-gas analyzer. Hydrazine (98%) was used directly to produce saturated hydrazine vapor, which was further diluted. Fluorine, chlorine, hydrazine, nitric acid and HF at their PEL concentrations were confirmed using Dräger detector tubes.

For all sensing experiments, the arrays were imaged on an ordinary flatbed scanner (Epson Perfection V200); the before-exposure image was acquired after 2 min. of 50% RH N_2 flow at 500 sccm. After-exposure images were acquired every minute with the same gas flow rates. Difference maps were obtained by taking the difference of the red, green, and blue (RGB) values from the center of every colorant spot (~300 pixels) from the "before" and "after" images; all difference maps shown here are averages of multiple trials. Digitization of the color differences can be performed using Adobe Photoshop™ or with a customized software package, ChemEye™ (ChemSensing, Inc., Champaign, IL). The chemometric analysis was carried out on the color difference vectors (provided as a database in Table S2) using the Multi-Variate Statistical Package™ (MVSP v.3.1, Kovach Computing); in all cases, minimum variance (i.e., "Ward's Method") was used for HCA clustering.

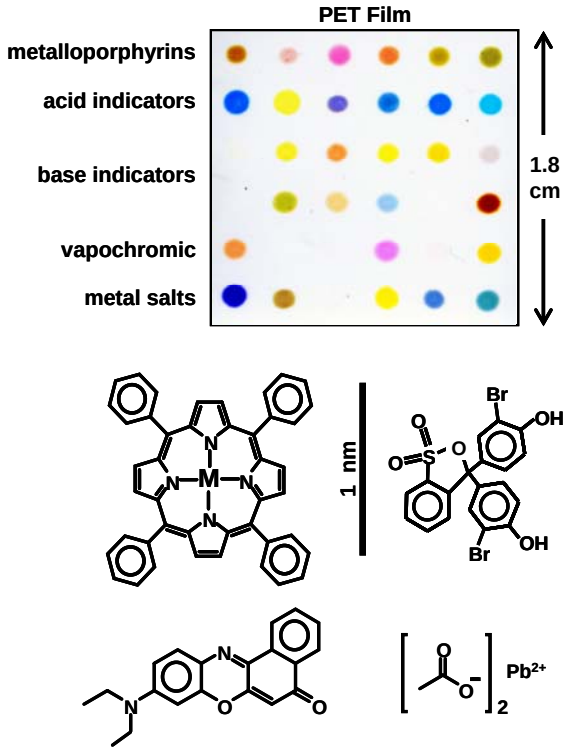

Fig. S1. The colorimetric sensor array consists of 36 different chemically responsive pigments that have been printed directly onto a non-permeable polyethylene terephthalate (PET) film. Examples of each dye class are shown. The 36 dyes (some of which appear transparent before exposure) were selected empirically based on the quality of their color response to a representative selection of different analytes.

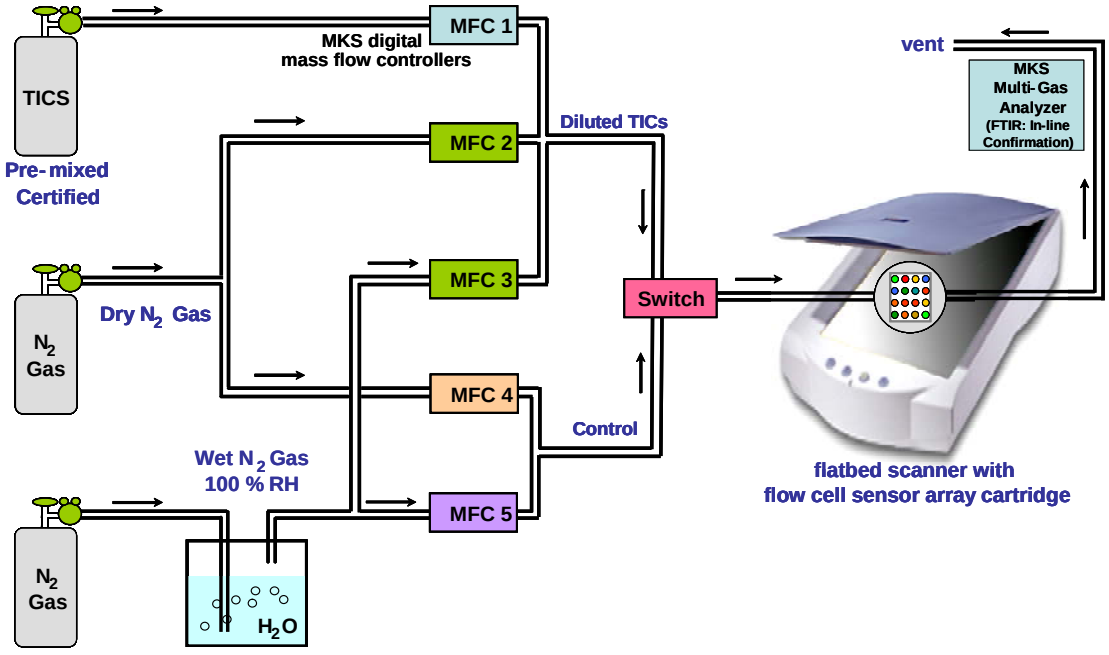

Fig. S2. Gas mixing rig used for exposure of colorimetric sensor arrays. The box labeled "switch" is actually a series of three three-way valves, which allows for venting and also diversion of analyte stream to the MKS multi-gas analyzer. MFC = mass flow controller.

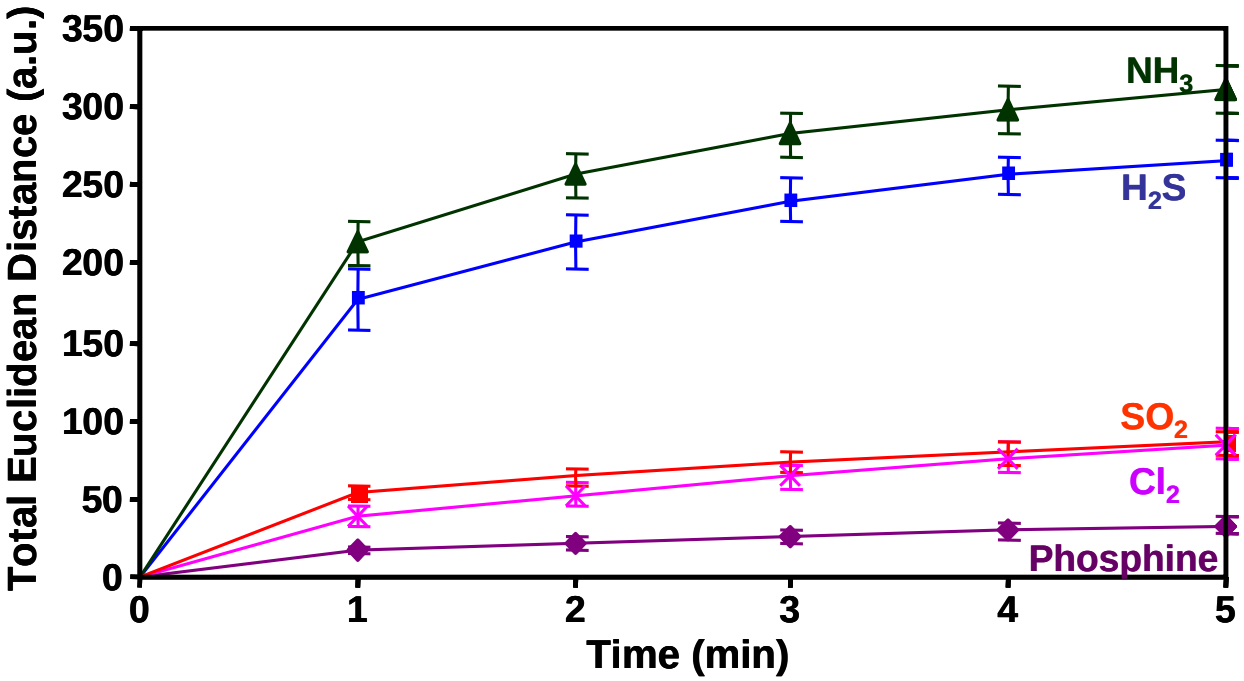

Fig. S3. Total Euclidean distance (i.e., total array response) versus time for five TICs at their PEL concentrations; the averages with the standard deviation of seven trials for each analyte are shown.

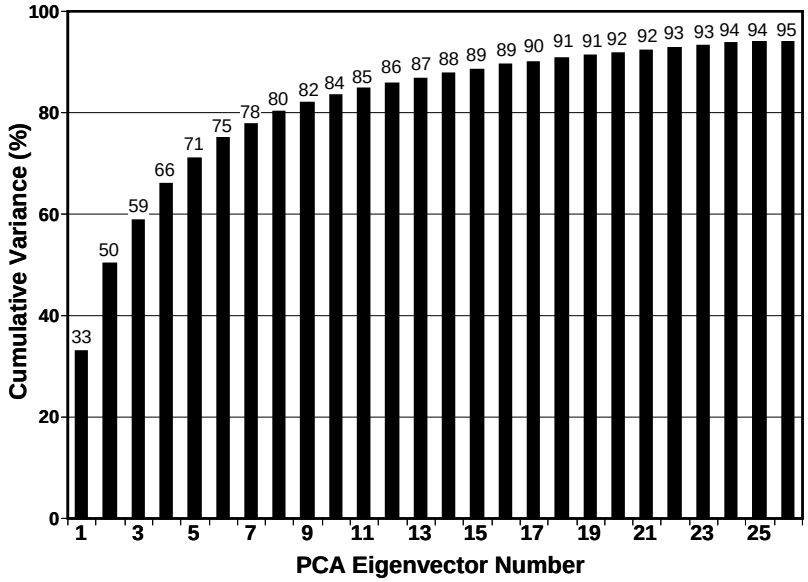

Fig. S4. Scree plot of the principal components from PCA of 147 trials using 20 TICs and a control. The colorimetric sensor array has an extremely high level of dispersion: 17 dimensions are required to define 90% of the total variance, 26 dimensions for 95% of the total variance, and 46 dimensions for 99%.

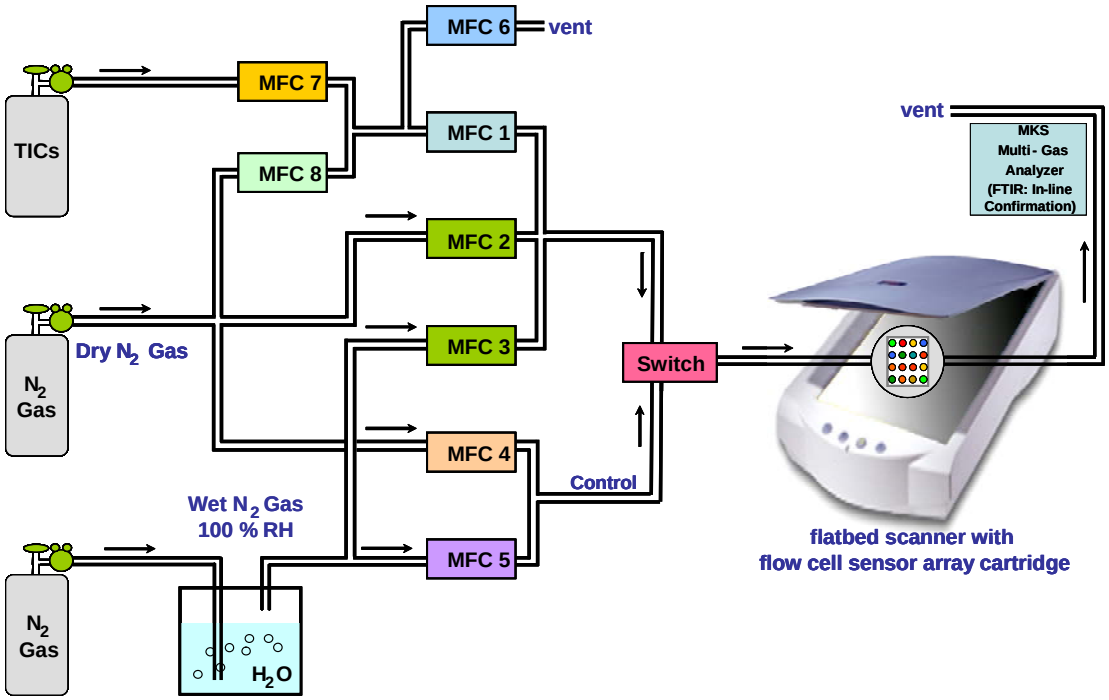

Fig. S5. Serial dilution gas mixing rig used for exposure of colorimetric sensor arrays. The box labeled "switch" is actually a series of three three-way valves, which allows for venting and also diversion of analyte stream to a MKS FTIR multi-gas analyzer model 2030. MFC = mass flow controller.

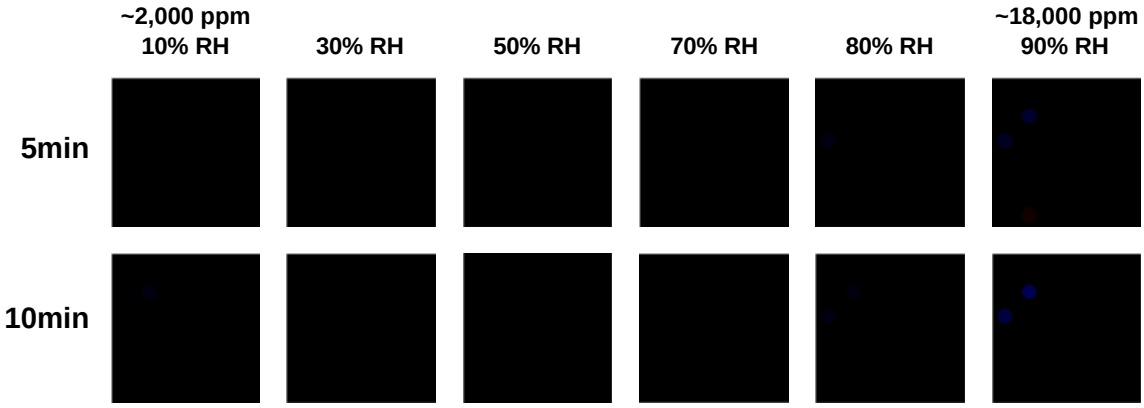

Fig. S6. The colorimetric sensor array is unaffected by humidity over a wide range. There is essentially no response to variations in humidity from 10% to 90% RH; average of three trials is shown. For display purposes, the color range of these difference maps is expanded from 4 to 8 bits per color (RGB range of 4-19 expanded to 0-255).

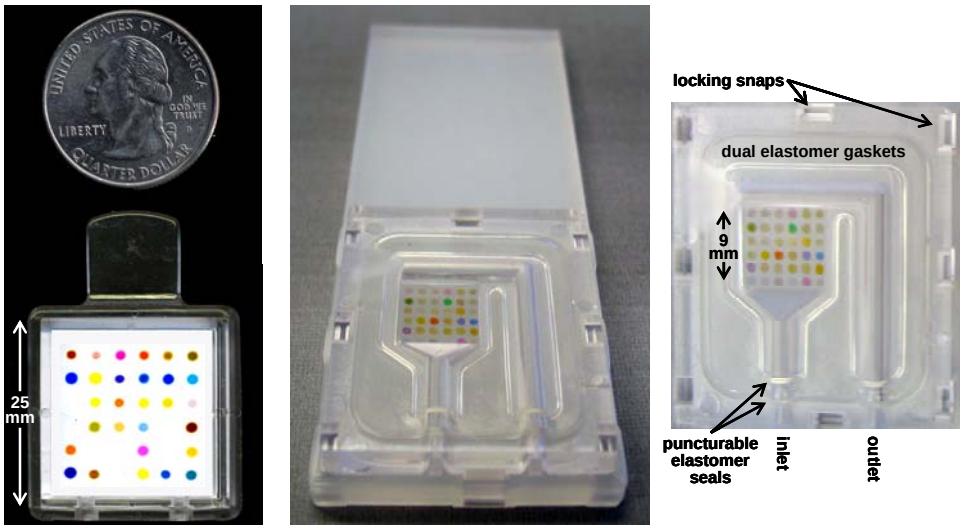

Fig. S7. Photographs of cartridged colorimetric sensor arrays, all on the same scale. Right: standard disposable cartridge used in these studies; the inside dimensions are 22x22x4 mm with a total dead volume ~2 mL. Middle: disposable low dead-volume self-sealing cartridge with the colorimetric sensor array printed directly on a PET (polyethylene terephthalate) flat. Right: close-up of the low dead-volume printed colorimetric sensor array and sealing system. The total head-space volume of the low dead-volume cartridge is ~150 μL (i.e., >10-fold smaller volume). The cartridges are produced by standard injection molding.

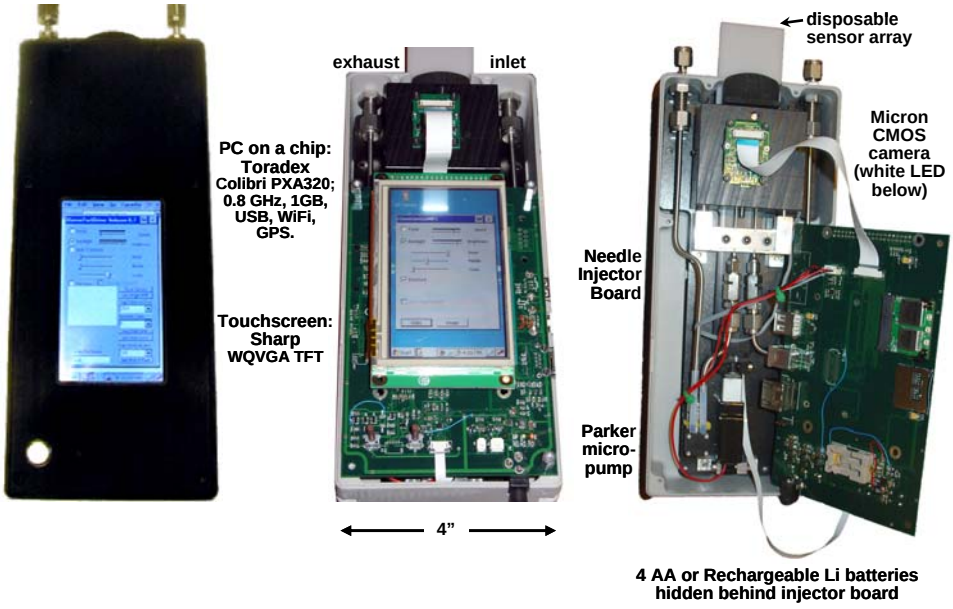

Fig. S8. Labeled photographs of a functional handheld prototype of the optoelectronic nose. Left: the fully assembled unit; center: with top cover removed; right: top electronics board and touchscreen display lifted vertically to the right. The disposable sensor array used with this prototype is shown in Fig. S1. The image quality of this prototype is considerably improved compared to the flat bed scanners used in this study (Epson Perfection V200); an improvement in S/N of a factor of 3 has been achieved even at this early stage of development.

Table S1. List of chemically responsive colorants.

Spot #	Name
1	5,10,15,20-tetraphenylporphyrinatozinc(II)
2	5,10,15,20-tetrakis(2,4,6-trimethylphenyl)porphyrinatozinc(II)
3	5,10,15,20-tetrakis(pentafluorophenyl)porphyrinatozinc(II)
4	5,10,15,20-tetrakis(2,4,6-trimethylphenyl)porphyrinatocobalt(II)
5	5,10,15,20-tetraphenylporphyrinatocadmium(II)
6	5,10,15,20-tetraphenylporphyrinatochromium(III) chloride
7	Bromophenol Blue + TBAH
8	Methyl Red + TBAH
9	Chlorophenol Red + TBAH
10	Nitrazine Yellow + TBAH
11	$HgCl_2$ + Bromophenol Blue + TBAH
12	$HgCl_2$ + Bromocresol Green + TBAH
13	Fluorescein
14	Bromocresol Green
15	Methyl Red
16	Bromocresol Purple
17	Bromophenol Red
18	Bromopyrogallol Red
19	4-amino-4-phenylbut-3-en-2-one + TsOH
20	H2(P-COOHP)2(CF3)2
21	Ethanone, 1-[4-[4-(dimethylamino)phenyl]azo]phenyl]-2,2,2-trifluoro-
22	Pyrylium, 4-[2-[4-(dimethylamino)phenyl]ethenyl]-2,6-dimethyl-,tetrafluoroborate
23	4-(4-Nitrobenzyl)pyridine + N-Benzylaniline
24	Napthyl Red + TsOH
25	Disperse Red
26	Reichart's Dye
27	Reichart's Dye #3
28	Nile Red
29	Disperse Orange #25
30	Acridine Orange Base
31	Crystal Violet
32	$Zn(OAc)_2$ + *m*-Cresol Purple + TBAH
33	$Pb(OAc)_2$
34	$LiNO_3$ + Cresol Red
35	$AgNO_3$ + Bromophenol Blue
36	$AgNO_3$ + Bromocresol Green

Spot numbering from left to right, top to bottom for 6x6 array shown in Fig. 1.
TBAH: 1.0 M tetrabutylammonium hydroxide in 2-methoxyethanol
TsOH: 1.0 M *p*-toluenesulfonic acid in 2-methoxyethanol

Table S2. Color difference database for 20 TICs and a control

	R01	G01	B01	R02	G02	B02	R03	G03	B03	R04	G04	B04	R05	G05	B05	R06	G06	B06	R07	G07	B07	R08	G08	B08	R09	G09	B09
Control_1	-0.481155	0.234787	1.104349	-0.457977	-0.107246	0.431885	0.565216	0.571014	-0.910141	0.63768	0.226089	0.86377	-0.571014	0.031883	-0.263769	0.713043	-0.034782	-0.304348	0	-0.014492	1.214493	-0.342026	0.185516	0.41449	-0.556522	-0.144924	3.428986
Control_2	-0.13044	-0.301449	0.217392	0.292755	0.057968	0.350723	0.318848	-0.591309	-0.037674	-0.446381	0.805794	-0.205795	0.620285	-0.539124	-0.536232	0.455078	-0.040581	1.133331	0.182609	-0.182606	0.976807	0.03479	0.228989	0.47826	0.046377	0.052174	1.527542
Control_3	-0.965218	-0.559425	-0.243478	-0.220291	0.269562	-0.118835	-0.556519	-0.255066	-1.565216	-0.408707	0.284058	0.907249	-0.620285	0.762321	0.449275	0.573914	-0.005798	-0.124638	-0.107246	0.368114	-0.365219	-0.249283	0.486954	0.886955	-0.437679	-0.18261	-0.614487
Control_4	-0.284058	-0.13913	-0.089855	0.243469	0.168121	-0.628983	0.246368	0.237679	-1.457962	-0.289856	0.342033	-0.872459	0.423187	-0.023178	0.194202	-0.084061	-0.18261	-0.069565	0.101449	-0.11594	0.492752	0.573914	0.547821	-0.950726	-0.385509	-0.127537	1.533325
Control_5	0.055069	-0.09565	0.330435	0.536224	-0.54203	0.08696	0.46376	-0.150726	-0.037674	0.808701	-0.237686	-0.330437	0.518845	-0.286957	-0.208695	0.582603	-0.707253	0.45797	0.069565	-0.513042	0.446381	0.165222	-0.455063	0.440582	-0.211594	-0.411594	4.788406
Control_6	-0.36232	-0.446381	0.481159	-0.078262	0.159424	0.539124	-0.420288	0.171013	0.466675	-0.156525	-0.243484	0.614494	-1.394196	-0.814491	-0.634783	0.289856	-0.00869	0.50145	0.101449	0.31884	0.588409	0.286957	0.118835	0.121738	-0.857971	-0.373913	2.594193
Control_7	-0.765213	0.23188	0.385508	0.284058	0.634789	-0.814484	0.53334	-0.168121	-0.843475	-0.124634	-0.115936	0.878265	-0.411606	-0.559425	-0.92174	-0.228981	0.173912	-0.284058	0.666667	1.197102	-0.530426	0.063766	0.089859	0.144928	-0.040577	-0.13623	2.431885
HCHO_1	0.626083	1.321739	0.034782	-1.060867	0.078262	0.333328	0.159424	-0.060875	-0.228989	1.014496	1.005798	1.197105	0.214493	0.313049	-0.086958	0.63768	0.831879	0.428986	-0.211594	-0.657967	0.028976	0.011597	0.41449	3.211594	-0.759415	-0.040581	1.988403
HCHO_2	-0.008698	-0.63768	-0.397101	-0.171021	1.127533	2.092758	0.063766	-0.486961	-0.799988	-0.562317	-0.979713	-0.452171	-0.759415	-0.634781	-0.475363	0.034782	-0.434784	0.553623	0.002899	-0.104347	-0.081146	0.255066	-0.330429	-1.124634	0.397102	0.040577	0.678268
HCHO_3	-0.124641	0.272465	0.121739	-0.979706	0.142029	-0.588402	0.069565	0.295654	-0.736237	-1.399994	0.36232	-0.107246	-0.304344	0.208694	0.489855	0.156525	-1.008698	0.27536	0.078261	-0.043476	-0.101456	-0.55072	-0.026093	0.092754	-0.295652	0.046377	0.597092
HCHO_4	-1.113045	-0.605797	0.107245	-1.379715	0.002899	-1.814491	-0.301453	1.208694	-1.176819	-1.171005	0.481159	0.336231	-0.588402	-0.176811	0.962319	-0.147827	-1.165222	-0.611595	-0.052174	-0.069565	0.115952	-0.72464	-0.278259	1.208694	-1.228985	-1.249275	-0.295654
HCHO_5	-1.750725	-1.950726	-1.484058	0.544922	0.368118	-2.959419	-0.55072	0.681156	-1.307251	0.350723	0.762318	0.631886	-0.063766	0.344925	0.008696	2.837677	2.333336	0.988407	0.110145	-0.049274	0.486954	-0.298553	0.936234	-0.55072	-0.133335	0.060869	-0.515945
HCHO_6	0.26667	-0.089855	0.168116	0.272476	-0.144928	-1.324638	0.115936	-0.202904	-1.185501	-0.031891	0.049274	0.591305	0.028984	0.011589	0.286957	0.901451	-0.588409	0.672462	1.130435	1.492752	0.339127	0.805801	-0.428986	0.492752	0.185509	-0.069567	0.336227
HCHO_7	0.86087	1.165218	0.89855	0.565216	-0.023186	-0.182617	0.571014	1.86377	-0.252182	0.997101	0.028992	0.898552	0.77681	1.18261	0.918842	1.663765	1.255074	0.852173	-1.171014	-0.733334	1.150726	-0.046387	0.63768	2.788406	0.544926	-0.075361	-0.028992
Arsine_1	-0.591309	-0.295654	0.385508	0.281158	1.727539	1.936234	-0.513046	0.527534	-0.866669	0.576813	0.130432	0.115944	-0.055069	0.089859	-0.547826	1.730438	-0.176811	0.942028	-0.144928	0.18261	2.339127	-0.104355	0.692749	0.17971	0.115942	0.252174	0.10434
Arsine_2	-0.368118	-0.263767	-0.504348	-1.199997	0.794205	-1.324646	-1.663773	0.814491	-1.257965	-1.365219	0.133339	-0.281158	-0.826088	0.173912	-0.443479	0.005798	0.086952	0.069565	-0.234783	-0.162317	-0.481171	-0.646378	0.084061	-0.130434	-0.49855	-0.086958	-0.020279
Arsine_3	-1.304344	-0.591305	-0.113043	-0.886948	-0.518837	-1.420288	-1.066666	-0.628983	-1.27536	0.420288	0.101448	0.263767	-1.026093	-0.084061	-0.515943	0.559425	-1.115936	0.249275	0.252174	-0.515942	-1.455063	-1.127548	-1.165222	0.492754	-0.24058	0.066667	-0.469574
Arsine_4	0.539131	-0.127537	-0.707247	0.562317	0.710144	-0.043472	0.704346	-3.449272	-0.823181	0.718842	0.475365	-0.544926	0.260872	0.142029	0.469565	1.385506	0.942024	0.930431	0.124638	-0.020288	1.452179	0.704346	1.295639	1.13913	-0.211594	0.144926	1.582611
Arsine_5	-0.124634	0.6029	-0.150724	1.049271	0.544922	0.179718	-0.185501	0.762321	-1.571014	1.043488	0.182602	0.162315	0.089851	0.040581	0.350724	0.527534	-0.005798	0.478264	0.463768	0.304348	1.252182	1.199997	0.771027	0.886955	0.292753	0.652174	0.078262
Arsine_6	-0.246376	-0.066669	-0.223188	-1.197113	-0.463768	-0.17971	-0.420288	-0.194199	-1.359421	-1.005798	-0.034782	-0.089855	-1.246376	-0.5942	-0.194203	-0.333332	-0.991302	-0.29855	-0.095652	0.063768	0.171021	-0.521744	0.455078	1.084059	-0.249275	0.133333	-0.205795
Arsine_7	1.04348	0.721737	1.353622	0.643478	0.478264	0.524635	0.53624	0.440582	-1.228973	0.031891	0.194206	-0.217392	1.455078	0.191299	0.634783	0.901443	-0.794205	0.423189	0.388406	0.136232	0.713043	1.040573	0.898544	-0.356522	0.356522	0.115942	0.742035
Phosphine_1	-1.05217	0.199997	-0.472464	0.084061	0.643478	-0.36232	-0.423187	-1.249275	-1.802902	-0.197098	-0.182606	-0.078262	-1.460876	-0.73333	0.704348	0.127533	-0.773911	-0.565216	-0.217391	0.023188	-0.055069	-0.58551	-0.269562	-0.736233	-0.055073	-0.176811	-0.049271
Phosphine_2	-1.046371	-0.559418	0.194204	-1.269577	-0.797096	0.257973	-1.020294	0.762321	-0.721741	-0.605804	0.043476	-0.142029	-0.475357	-0.228989	0.231884	0.008698	-0.547825	-0.452173	0.046377	0.597101	-0.910156	-1.881165	-1.179718	0.017391	-0.165217	-0.069565	-0.544937
Phosphine_3	0.942024	0.301449	-0.063768	0.12175	0.68116	0.571014	0.214493	-6.565216	-4.582611	0.162323	0.701447	0.715942	0.017395	-0.600006	1.284058	-0.011597	-0.718838	0.956522	0.023188	0.394203	0.576813	0.228989	0.020279	-0.82029	0.08116	0.208696	1.455078
Phosphine_4	1.115936	1.304348	1.185507	-0.049271	0.220291	-1.057968	-0.443481	-0.008694	-1.617386	-0.631882	0.599998	-0.014492	-0.623184	-1.31884	-0.431883	1.185509	0.460869	0.828987	0.046377	-0.124638	-1.017395	-0.388397	-0.113052	0.481159	-0.124638	-0.53913	-0.084061
Phosphine_5	-0.715942	-0.356522	-0.46087	-0.834793	-0.507248	-0.881157	-1.565216	-0.715935	-0.08696	-0.171021	0.191303	-0.173912	-1.10144	-1.576813	-0.457972	-0.365219	-1.469566	-0.124638	-0.06087	-0.127537	-0.849274	-2.023193	-0.663773	0.275363	0.156522	-0.11884	1.321747
Phosphine_6	-1.260872	-1.353622	-1.330435	-0.86377	-0.634781	0.162323	-1.165222	-0.298553	-0.939133	-0.718842	-0.721741	0.301449	-1.379707	-1.707245	0.263768	0.321739	-1.162323	-0.217392	0.066667	0.037682	-0.840576	-1.440567	-1.918839	0.205797	-0.101448	-0.536232	-0.956512
Phosphine_7	-0.533333	-0.031883	-0.194204	-0.973907	0.153625	-0.420288	-1.202896	0.115944	-1.936234	-0.1884	-0.324638	-0.22319	-0.782608	-0.072464	1.104347	-1.191299	-1.037682	-0.614494	-0.217391	-0.489855	-0.704361	-0.388412	-0.382614	-0.330435	0.272464	-0.014492	-0.069565
Diborane_1	-0.336227	0.156521	-0.107246	0.310135	0.110146	0.069565	0.750732	1.18261	-0.246384	0.773911	2.173912	2.115936	0.852173	0.663765	0.50145	1.298553	-0.028984	1.350723	-0.211594	-0.385508	0.553619	0.382614	0.194199	-1.257973	0.73913	-0.05797	-0.823196
Diborane_2	-0.843475	-0.443478	0.492752	-1.011597	0.431885	-0.031876	0.020294	-0.020294	-0.41449	-0.084045	0.342026	0.579712	0.078262	-0.217392	0.333334	0.936234	0.063766	1.046375	-0.226087	-0.344927	-0.866669	-0.446381	-0.072464	-1.472464	0.208696	-0.176811	-1.037674
Diborane_3	-0.492752	0.165218	-0.434783	-0.147827	-0.13623	-1.26088	-0.53624	-0.081158	-2.078262	0.040573	0.08116	-0.81739	-0.669571	-0.072464	-0.46087	1.275368	-0.400002	0.327534	0.02029	-0.278259	-1.559418	0.8116	-0.44928	-1.513042	-0.12174	0.142029	-3.252182
Diborane_4	-1.026085	-0.675362	-0.405797	-1.03479	0.289856	-0.855072	-0.385498	-0.428986	-1.449265	-0.043488	-0.089855	-0.200001	0.431885	0.428986	0.718841	1.408695	-1.014492	-0.086956	-0.214493	-0.353624	-1.153625	0.623199	0.292755	-1.87826	0.65797	-0.391304	-2.260864
Diborane_5	-0.460869	-0.301449	0.310145	-0.130432	-0.234787	-0.489853	0.36232	0.005798	-1.272461	0.185516	0.197102	-0.492752	-0.417389	-0.773918	0.026087	1.257973	-1.408695	0.788406	0.449275	-0.437681	-0.495651	0.315933	-0.49855	-1.37681	1.002899	0.014493	-2.782608
Diborane_6	-0.597099	0.255074	0.269565	-1.043472	-0.484062	-0.991302	-0.823196	0.173916	0.026077	-0.744934	-0.36232	0.417391	-1.217392	-0.171013	0.055072	1.336231	-1.582607	-0.475361	-0.208696	-0.646378	-0.626083	-0.257965	-1.159424	-0.855072	0.515944	0.046377	-1.095657
Diborane_7	1.069565	0.713047	0.62029	0.617401	0.011597	0.704346	-0.440567	-1.217392	-1.211594	-0.718842	0.684052	1.686958	-0.147812	0.171013	1.620289	0.956528	-1.066666	1.771011	0.408695	-0.510139	0.89856	0.96521	1.162323	0.217392	0.544928	-0.162319	-0.324631
H2S_1	-0.805801	-0.802898	-0.382608	0.423187	0.17971	-1.939133	0.028992	0.165215	-0.884048	-0.240585	0.362316	-0.634785	0.588402	1.762321	0.762319	1.321739	0.394203	0.281162	0.002899	-0.113045	-0.411591	1.05217	1.226089	-1.376812	-0.405798	-0.313044	-1.066666
H2S_2	-0.623192	-0.188408	0.072464	0.089844	-0.663773	-1.072464	0.597107	-0.049278	-0.660873	0.121735	0.228989	-0.852177	1.063766	0.81739	0.944928	-0.602898	-2.599998	-1.142029	-0.005797	-0.23768	-0.069565	1.008698	0.255066	-0.040581	0.4	0.095652	-0.457977
H2S_3	-0.272476	1.373917	1.536232	0.124634	0.440582	0.202896	-1.58551	0.54203	-1.489853	0.342026	0.556519	-0.217392	-1.840576	-1.86956	-3.571014	-0.50145	-0.469566	-0.968117	0.217391	-0.098551	0.437683	-0.008682	0.107239	0.092751	0.234783	0.315941	-1.342026
H2S_4	-1.257973	0.504349	0.17971	-1.13623	-0.428986	-1.48407	-1.826096	-0.50145	-1.855072	-2.072464	0.092758	0.011593	-1.875359	-0.104347	1.713043	-0.144928	0.020294	-0.078262	0.452174	0.049274	-0.733322	0.052185	-0.153625	-0.698551	0.252174	-0.228985	-0.452179
H2S_5	-0.956528	-1.571014	-0.437681	-0.510132	-0.301453	-2.089859	0.095657	0.394203	-1.313049	0.026093	0.484055	0.785507	-0.666672	0.356522	0.924639	0.121742	0.18261	0.440578	0.321739	0.069565	-0.017395	-0.475357	0.614502	-0.573914	0.3971	0.597101	0.794205
H2S_6	-1.559418	-3.057972	-2.94203	0.199997	-0.17392	0.666672	0.130432	0.597099	0.107254	0.371017	0.605797	1.249275	0.336243	1.510139	1.043478	-0.101448	-1.582603	0.176811	0.310145	0.330437	0.260864	-0.365219	0.072464	-0.25507	0.249275	0.594204	-0.240585
H2S_7	-0.492752	0.736237	1.371014	-0.208694	0.733337	1.034775	0.301453	-0.504349	-0.257965	0.452179	0.773911	0.266666	0.191299	1.466675	1.504349	0.855072	0.365219	0.388405	-0.84058	-2.571014	-0.834793	-0.559418	0.692749	-0.47826	-0.594202	-1.008696	0.681168
(CH3)2NH_1	-1.782608	3.060867	-2.489855	-3.295654	5.405792	-13.7971	-1.582611	9.391304	-17.71304	-3.489853	-3.443478	4.231884	0.095642	-1.263771	-0.550726	-1.066666	1.994202	0.747826	0.101449	-0.411591	-1.426086	-0.513031	0.634781	-0.336231	-0.72464	-0.953625	2.405792
(CH3)2NH_2	-2.339127	0.405796	-2.449276	-3.588409	4.176811	-10.28407	-0.634781	8.623192	-16.32173	-2.040573	-3.078259	4.423187	-0.431877	-1.37101	0.098551	-0.901443	1.246376	0.365219	-0.478261	-0.588406	0.107254	-1.417389	-0.684052	2.075363	-1.162317	-1.121738	2.437683
(CH3)2NH_3	-2.794197	2.269566	-3.188406	-3.263763	6.794205	-14.88116	-0.243469	13.03768	-18.6174	-1.542023	-2.486961	6.965214	-0.150726	-1.747826	-1.542028	-1.342026	1.066673	0.66087	0.133333	-0.411594	-0.269577	-1.434784	-0.652176	1.65797	-0.889856	-0.834784	2.376816
(CH3)2NH_4	-2.962326	1.707249	-3.130435	-3.849289	6.982605	-16.13334	-0.440582	12.64927	-19.17101	-1.400009	-3.756516	7.47826	0.518829	-2.872459	-0.353624	-0.13623	1.168114	0.649277	0.486956	-0.289856	-0.278259	-0.681168	0.568115	2.356522	-1.15942	-1.84058	6.023178
(CH3)2NH_5	-1.553627	2.756523	-2.4	-2.826096	6.686951	-14.45508	-0.379715	10.65508	-15.83479	-0.408691	-2.089851	7.173916	0.391296	-1.275368	-1.101448	-0.695648	1.840584	0.571018	-0.115942	-0.194202	2.744934	-0.631882	1.24057	1.553619	-1.086956	-1.269566	5.797104
(CH3)2NH_6	-3.260864	1.947823	-2.736232	-3.423187	4.620293	-13.63188	-1.185501	8.988403	-16.04639	-2.423187	-2.571014	5.017391	0.133339	-1.144928	1.431883	-1.142029	-0.640579	0.576813	-0.075362	-0.582611	-0.037674	-1.353622	-0.959427	0.698551	-1.234783	-1.472462	3.681168
(CH3)2NH_7	-0.591309	3.452171	-0.924639	-2.527542	6.750725	-14.84058	0.556519	12.43478	-17.31595	-0.927536	-2.971016	6.826088	0.147827	-1.446381	-0.373913	-1.089859	1.44928	2	-0.28116	-0.237679	1.527542	-0.315933	-0.037689	2.057968	-1.121738	-0.834782	5.342026
(CH3)3N_1	-0.571014	1.29855	-0.985508	-2.304352	5.971008	-13.46957	-0.756516	4.434776	-9.084061	-1.03479	-2.237679	3.359421	-1.095642	-0.802902	0.028984	-0.063766	0.547829	1.805798	-0.005797	-0.530437	-0.420303	-0.571014	-0.779709	-0.034782	-0.315941	-0.799999	1.782608
(CH3)3N_2	-0.275368	1.162315	-0.269566	-2.292755	6.744926	-13.26087	-0.191299	4.959419	-8.814484	-0.678268	-2.217392	3.686958	-0.855072	-0.376808	0.457972	0.092758	0.185509	0.866669	0	-0.113045	-1.084061	-1.31015	0.466675	1.600002	-1.13623	-0.721737	3.713043
(CH3)3N_3	0.333336	0.507248	-1.707247	-1.22319	6.382607	-12.92175	0.571014	4.373909	-9.011597	-0.118835	-0.875362	2.675365	-0.281158	-0.269569	-0.663768	1.742027	0.185501	0.47826	0.086957	0.27536	1.820297	0.707245	0.495651	1.359421	-1.397102	-1.420288	4.246384
(CH3)3N_4	-2.515945	0.321739	-2.834782	-3.744934	4.762314	-18.99132	-2.478256	4.246376	-11.6377	-2.165222	-3.669571	2.09565	-2.110153	-1.478264	-0.104349	-0.936234	-0.698547	-0.113041	-0.626087	-0.686958	-2.278259	-1.950729	-1.756516	-2.243477	-3.324635	-2.34203	2.739136
(CH3)3N_5	-0.875359	1.147823	0.031884	-2.881165	5.802895	-11.58841	-1.469559	6.234787	-12.73622	-0.915939	-1.289856	2.811596	-1.020279	-0.959419	0.68116	1.336227	0.249275	1.608696	0.043478	-0.153625	-1.182617	-0.588409	-0.22319	-0.002899	-0.084059	-0.379709	1.420288
(CH3)3N_6	-2.011589	1.246376	-1.336232	-2.881149	4.434784	-13.46957	-2.081146	4.484055	-12.24057	-2.281158	-1.405796	1.463768	-1.118835	-1.426086	-0.66087	-0.307243	0.13623	0.985508	0.002899	-0.721741	-0.704346	-1.542023	-1.55072	-1.017391	-2.243477	-2.402893	2.368118
(CH3)3N_7	-0.857971	0.785507	-1.669565	-2.084061	8.008698	-15.68697	-1.13623	8.449272	-15.32175	-0.768127	-2.078262	2.510147	-0.779709	-0.962318	-0.872463	1.489853	-0.278259	0.710144	-0.4	-0.327534	-0.350723	0.208694	0.744934	-3.046379	-1.257973	-0.707249	3.495651

	R01	G01	B01	R02	G02	B02	R03	G03	B03	R04	G04	B04	R05	G05	B05	R06	G06	B06	R07	G07	B07	R08	G08	B08	R09	G09	B09
Ammonia_1	-2.069565	-2.17971	-3.730434	-1.539139	1.084061	-7.237686	-1.634796	7.518837	-16.35572	-6.55073	-1.069565	12.91015	-0.33393	-2.886766	-1.369565	-6.765217	0.022319	0.707245	0.231884	-0.623188	0.011597	-1.385513	-1.350723	-2.50145	-1.034782	-1.040581	2.298553
Ammonia_2	-0.72464	-1.663769	-4.115943	-0.869553	0.031883	-6.855072	-0.802902	6.397102	-15.64928	-4.843491	-0.44928	12.51305	-0.98262	-2.898552	-0.608696	-12.65218	3.979706	0.301449	0.168116	-0.194206	-2.443466	-1.478271	-2.199997	-1.576813	-0.463768	-1.457972	2.666672
Ammonia_3	-1.666664	-2.579708	-3.292754	-1.660873	-0.13044	-5.397095	-2.266663	4.924637	-12.83479	-8.011597	-1.29855	11.22898	-1.565216	-2.492752	-0.988406	-9.99131	4.075363	1.286957	-0.086957	-0.846376	-1.39711	-1.272461	-1.918839	-1.97971	-1.730434	-1.756519	1.307236
Ammonia_4	0.194199	0.353622	-1.585507	0.127533	0.240578	-3.399994	-0.643478	4.907242	-9.22319	-6.524628	-1.34203	11.65217	0.886963	-1.078262	0.014494	-11.80869	4.492752	1.168118	-0.043478	0.249275	0.41449	-0.173904	0.295654	-0.22319	-1.344927	-1.640579	5.240585
Ammonia_5	-0.666664	-0.913044	-3.76232	-1.579712	0.521736	-3.211594	-1.031891	5.226089	-13.80289	-6.747833	0.768112	13.19131	-0.478256	-1.301453	-0.463768	-12.33334	5.115944	1.118839	0.171014	-0.252174	-1.428986	-1.678268	-0.744934	-0.631882	-0.762318	-0.81739	2.86087
Ammonia_6	-1.255074	-1.973911	-3.814493	-2.017395	-0.481163	-5.391304	-2.156525	1.918839	-7.701447	-7.286957	-0.588402	10.77971	-0.60289	-2.260864	-1.484058	-14.78841	4.37101	0.249275	-0.095652	-0.713043	-1.263779	-3.289856	-1.55072	-1.420288	-2.397102	-1.211594	2.484055
Ammonia_7	-5.472466	-3.768116	-4.8	-0.788406	-0.165222	-4.336235	0.350723	5.750725	-9.953629	-2.89566	1.298546	11.2029	1.884048	-0.86377	-1.976812	-10.84638	7.081161	0.652176	-0.002899	-0.15942	-1.063766	0.594193	-1.095642	-2.869564	-0.933332	-1.913044	6.455078
HCl_1	-5.736229	-0.675362	0.684058	-2.121735	-0.214493	-11.46957	-1.020294	-0.121742	-2.272461	-0.495667	-0.286957	-2.49855	-10.56233	0.124641	-3.597101	-0.802902	-0.057968	-0.002899	1.8	1.66087	-50.21159	4.066666	-53.4	-16.15652	25.71884	20.91884	-44.77681
HCl_2	-5.573914	-0.188408	1.588406	-1.066666	0.426094	-12.50145	-0.481155	0.147827	1.098541	0.13623	0.466667	-1.533333	-8.605789	-0.382614	-2.478262	-0.605797	-0.446381	-0.228985	5.066667	9.652172	-52.51595	4.521744	-46.94202	-25.79421	41.12464	34.7913	-44.95943
HCl_3	-4.733337	0.29855	0.860869	-1.86087	-0.205803	-10.06377	0.028976	-0.202904	-1.269562	-0.147827	-0.831886	-2.197098	-8.89856	-0.782608	-1.950724	-2.057968	-1.768112	-1.176811	4.17971	6.243477	-50.30145	3.118851	-43.60291	-23.69855	32.62899	27.35072	-44.37972
HCl_4	-7.568115	-1.805801	1.747827	-3.376816	-0.092758	-14.11884	-1.979706	-1.898544	-1.002899	-1.886963	-0.005798	-2.539131	-11.88117	-2.084061	-2.828983	-2.973907	-1.695656	0.472462	4.628985	8.353622	-55.04057	2.828979	-49.83768	-26.95942	41.13623	36.05797	-40.06087
HCl_5	-5.460869	-1.046375	1.289855	-1.721741	-0.446381	-10.59421	-0.472473	-0.182602	-1.289856	-0.382614	0.753624	-2.869568	-9.704346	-0.849274	-1.724636	-1.086952	-0.460869	0.130432	3.8	3.742027	-45.37102	2.655075	-41.43189	-21.86377	32.22319	25.87246	-42.46376
HCl_6	-6.107246	0.455074	1.704349	-1.924637	0.278259	-10.84058	0.165207	0.188408	0.562317	-0.652176	1.330437	-3.281166	-9.495651	0.205795	-2.411594	-1.771011	-0.194206	-0.15942	3.976811	8.260872	-49.63478	3.211594	-47.74202	-25.26667	35.71015	30.56522	-41.44058
HCl_7	-12.28986	-2.915939	1.150724	-4.562332	-0.756523	-15.22029	-1.77681	-0.99131	-2.272461	-0.507248	0.686958	-3.304352	-13.29276	0.008698	-2.852175	-2.579704	-2.698555	-5.040577	4.02029	9.191307	-63.05797	1.330429	-53.44058	-28.81739	41.05508	37.16812	-41.93333
(CH3)NH2_1	-1.811592	0.26667	-2.550725	-0.979706	1.417389	-8.86087	-1.591309	9.455078	-18.16812	-4.046387	-2.344925	9.669563	0.002899	-2.075363	0.730434	-9.571007	3.692749	-0.484058	-0.115942	-0.356522	-1.857971	-0.356522	0.165222	2.397102	-3.055073	-1.637684	4.39711
(CH3)NH2_2	-6.843483	0.191307	-2.147826	-1.194199	2.591309	-8.924637	-1.066666	9.779709	-14.65508	-4.10144	-1.388409	6.953625	-1.756516	-0.857971	-0.991304	-2.72464	1.391304	-0.313046	0.115942	-0.304348	-1.933334	-0.542038	0.092758	0.568115	-1.014492	-0.333334	4.634781
(CH3)NH2_3	-4.765221	0.759422	-0.17971	-0.617386	1.371017	-6.799988	-0.982605	6.115944	-12.08986	-3.478256	-1.97681	4.771015	-0.800003	-1.846375	-1.037682	-5.681152	3.762314	1.620289	0.185507	-0.397102	0.631882	-0.591293	-0.243484	2.811592	-3.36232	-2.127533	6.39711
(CH3)NH2_4	-5.936234	0.49855	-1.527536	-1.652176	2.330437	-7.289856	-0.675354	7.142029	-10.91014	-4.095657	-1.504349	5.866665	0.066666	-2.008698	-1.855072	-3.886955	2.118843	0.391304	0.028986	0.417393	-0.765213	-1.344925	0.324646	2.460869	-1.568115	-0.614494	3.710144
(CH3)NH2_5	-7.814491	1.371014	-1.571014	-1.252167	2.342026	-8.301445	-0.040573	12.91594	-19.35942	-4.234787	-3.034782	8.33913	-1.133331	-0.237686	-1.284058	-4.084061	3.776817	-0.028988	-0.026087	0.165216	0.240585	-0.199997	0.762329	0.173912	-0.362318	0.124638	2.692764
(CH3)NH2_6	-10.26956	-2.26667	-3.371014	-1.753616	2.571014	-9.91304	-0.60289	10.10145	-17.72174	-3.420288	-3.382607	5.997101	-2	-1.443481	-0.492754	-6.698547	2.147827	0.544926	-0.22029	-0.060871	-0.814499	-0.788406	-0.484055	-0.171015	-1.049276	-1.031883	2.855072
(CH3)NH2_7	-8.339127	0.182606	-1.982609	-0.46376	3.472466	-10.4058	-0.342026	12.84638	-20.55072	-2.72464	-1.510147	8.237686	0.127533	0.286957	-0.243479	-2.744926	1.718842	0.101452	0.089855	-0.324638	-0.571014	0.852173	-0.457977	-0.113043	-0.542028	-0.669566	2.472458
Cl2_1	-5.837685	0.86377	-0.92174	-3.057968	2.133331	-8.246368	-0.634781	0.121742	0.147827	-0.985519	-1.118843	0.573914	-2.889862	0.284058	-3.194206	-1.869568	0.44928	-2.857971	2.692754	5.118839	-5.107254	0.301453	-7.504349	4.333332	36.27537	31.33624	-26.8
Cl2_2	-4.547829	1.072464	-0.437681	-4.014496	1.953621	-3.550735	-0.634781	-0.385506	0.147827	-3.257965	0.678261	0.443478	-1.762329	-0.014488	-1.313044	-1.501442	-0.304344	-0.90435	3.176812	5.675362	-5.284058	-1.017395	-5.939133	18.24348	46.65507	40.69276	-18.42319
Cl2_3	-2.689857	1.110146	-0.4	-4.028976	2.373909	-6.814499	-0.605804	-0.313049	-2.150726	-4.17392	-0.22319	-0.426086	-0.017395	0.739136	0.107246	-2.347832	-1.260872	-2.095654	1.950725	5.507248	-5.385513	-0.814484	-4.205795	13.11594	41.51015	40.67826	-17.26087
Cl2_4	-4.901443	0.950722	-1.460869	-4.576813	1	-6.739136	-1.608688	-1.197098	-1.634781	-4.249268	-1.017395	-0.895645	-3.55072	0.843491	-3.631884	-3.628983	-0.721741	-4.36232	1.484058	4.15942	-3.553619	-1.301453	-6.336243	6.356522	29.89565	26.42029	-28.82898
Cl2_5	-3.562317	2.191307	0.092753	-2.779709	2.524635	-5.776817	0.391296	0.385506	0.075363	-3.194214	0.153625	-0.266666	-1.394203	0.588402	-0.008696	-1.205803	-1.011597	-0.686958	0.686957	4.008698	-4.333328	1.231888	-4.628983	4.86087	35	27.75652	-27.88986
Cl2_6	-4.730438	1.313049	-0.037682	-3.359421	2.263771	-5.22319	0.472458	0.092758	-0.10144	-3.263779	-0.168114	-1.866661	-1.744919	0.918839	-2.223188	-0.762314	0.104355	-2.594204	3.591304	6.36232	-6.159409	-0.373917	-3.939133	18.93623	51.02319	44.4174	-17.40869
Cl2_7	-3.44928	0.811592	-0.953623	-3.544937	1.855072	-6.36232	-0.388412	0.368111	-2.226089	-3.289856	0.026085	-0.915939	-1.695663	1.208694	-1.805798	-1.446381	-0.481155	-2.402901	1.492754	4.985508	-3.739136	-0.081161	-4.478256	4.930435	51.96812	48.11884	-21.71884
Phosgene_1	-0.400002	-0.162319	-1.04058	1.907242	-0.379707	0.176819	1.510147	0.176811	-0.304352	0.211594	0.739128	1.623188	0.084061	-0.165215	1.77971	1.031883	0.54203	1.846375	0.02029	0.156523	1.568115	1.371017	-0.356522	-0.715942	7.02029	4.25507	-9.026093
Phosgene_2	-0.263763	-0.289852	-0.165216	-0.686966	0.034782	-0.382614	0.675369	0.373913	-0.652176	-0.96521	1.217392	-1.568115	0.191299	0.13623	0.727535	0.144928	0.09565	0.463768	0.185507	-0.165215	-1.426086	0.046371	-2.046371	-0.440582	10.97391	6.176815	-8.246368
Phosgene_3	0.208694	-0.014492	-0.31884	-0.214493	0.118843	-0.324646	-0.605789	-0.147827	0.05217	-0.878265	-0.481163	-0.704353	-1.043472	-0.176811	0.371016	-0.226089	-0.057976	0.191303	0.286956	-0.237679	0.252182	-0.739136	-2.686966	-0.5942	10.50435	5.63768	-9.191315
Phosgene_4	-0.901443	-0.602894	-0.391304	-1.113052	-0.985504	-1.750732	-1.36232	0.286957	-1.927536	-1.475357	-0.402893	-0.686958	-0.405792	-0.081154	0.481159	-0.886963	-1.823189	-0.171013	0.04058	-0.008698	-0.866669	0.347839	-3.689865	-1.718842	10.33333	4.988403	-11.83479
Phosgene_5	-0.85508	-0.515938	-0.037682	-0.339127	0.156525	0.295654	-0.228973	-0.043472	-0.237686	-1.214493	0.081161	0.510147	-0.359421	-0.924637	0.869564	-0.472466	-1.069565	-0.124638	0.168116	-0.124638	-0.889847	-0.846375	-2.426086	-0.947823	9.313042	3.904346	-11.71304
Phosgene_6	-0.794205	0.02319	0.49855	-0.472458	-1.078262	-1.608688	-1.428986	-1.356522	-0.828979	-2.333344	-1.156525	1.130432	-2.315948	-1.353622	0.614492	-1.089851	-1.86956	0.208698	0.698551	0.057972	-1.08696	-0.739136	-3.968109	0.139133	6.892754	3.402897	-10.26666
Phosgene_7	-0.460869	0.095654	-0.026087	-1.10434	-0.643478	1.513046	-0.866669	0.133335	-0.199997	-1.443466	-0.266663	-0.202896	-0.915939	-0.866669	0.31884	-1.336227	-2.237671	-0.591301	0.313044	-0.226089	-2.324631	-0.50145	-2.124634	0.092754	8.240578	4.110142	-9.86087
F2_1	-2.063766	0.414494	0.289855	-1.901443	0.837685	-3.423195	0.562317	-0.052177	-0.301437	-1.176819	-0.730431	0.571014	0.188408	0.428986	-0.324637	-1.05217	0.063766	-0.466667	1.037681	2.281162	-1.959412	0.889847	-11.03189	-5.110146	18.88117	15.85797	-18.42609
F2_2	-1.965218	0.101448	-0.005797	-1.669571	1.573914	-2.124634	0.110153	-0.715942	-0.324646	-1.121735	-0.756523	0.95652	-0.330429	0.307251	-0.431884	-0.988411	-0.304352	-0.495651	0.736232	2.089855	-2.915939	1.559433	-12.70725	-6.944927	16.6116	13.26087	-17.35072
F2_3	-1.840584	0.066666	-0.136232	-3.15361	1.417397	-2.037682	-0.576813	0.127533	-1.391296	-1.715942	-0.550724	0.165218	-0.41449	0.698547	0.310144	-0.437683	-0.608696	0.110144	0.510145	2.257973	-3.875351	-0.295654	-7.371002	0.721741	14.04348	11.97971	-13.08406
F2_4	-1.428986	0.649273	-0.240581	-1.553619	1.379707	-3.05217	-0.237686	-0.756516	-0.359421	-1.553619	-0.081158	0.527538	0.968117	0.91304	0.252174	0.260864	0	0.785507	1.17971	2.571014	-1.713043	1.315948	-6.246384	-0.484058	15.26377	13.0029	-14.26666
F2_5	-2.759422	-0.672462	-1.089855	-2.657974	0.568115	-2.889854	-0.385498	0.857971	-0.292755	-1.423187	-1.452179	0.617393	0.081161	0.837685	0.394203	-1.443481	-0.469566	-1.588406	0.776812	2.118843	-2.94783	0.684067	-10.9855	-3.553623	19.27247	17.11015	-15.47537
F2_6	-1.849274	0.762318	0.089855	-1.144928	0.675362	-1.521744	-0.05217	-0.026093	-0.026077	-1.591293	-0.45797	-0.324638	-0.875359	-0.513046	-1.037682	-0.886955	-0.959419	-0.466667	0.666667	1.628986	-2.930435	1.373917	-8.942032	-1.698551	13.65217	11.2	-11.11014
F2_7	-1.507248	-0.086956	0.089855	-1.72464	0.965218	-1.831879	0.411591	0.686958	-0.594208	-1.391312	0.333332	1.307243	0.814491	0.431885	0.669565	0.046379	-0.13913	0.211594	1.089855	1.811592	-1.008682	1.020279	-8.168121	-2.446377	20.27246	17.31594	-14.54492
NO2_1	-8.353622	0.823189	-0.886957	-8.924637	3.081161	-13.15653	-0.330429	-1.385509	-0.472458	-12.40869	1.66087	-2.463768	-5.055069	1.452171	-0.70145	-0.530434	-2.878265	-2.176811	1.194203	0.707245	-28.53334	4.426102	-33.54782	-4.289856	3.736231	1.724638	-34.36812
NO2_2	-8.005798	1.423187	-0.507247	-8.220291	2.753624	-11.06957	0.808701	0.443478	-0.014496	-13.07826	1.426086	-2.049278	-3.924644	1.521736	-1.275363	0.527538	-1.823189	-1.73913	1.228986	1.040579	-27.24059	3.800003	-31.38261	-6.136231	7.785505	4.173914	-37.1913
NO2_3	-6.834778	1.127537	-0.724638	-8.965225	1.011597	-10.23769	-0.252167	-0.069565	-1.889854	-11.41451	2.098549	-1.257969	-2.892754	1	-3.107248	0.678261	-0.486961	-0.855072	1.855072	0.115942	-33.70725	2.411591	-40.34493	-3.365217	3.452173	1.249275	-31.30145
NO2_4	-8.405792	-0.333336	-0.979711	-8.449265	0.965218	-10.79421	0.005798	1.052174	-0.298538	-12.37682	0.933334	-1.973915	-3.336227	0.185509	-0.994203	0.081161	-1.52174	-0.544928	1.469565	0.426086	-34.52754	3.379715	-33.33913	-5.515942	7.055073	4.130434	-38.7971
NO2_5	-8.373909	-0.292753	0.017391	-8.113037	1.118843	-9.95652	1.014496	-0.365215	-0.086945	-13.1942	1.217392	-1.510147	-5.171021	1.669563	-0.08116	-0.408695	-2.379707	-1.866667	2.095652	1.762318	-32.63188	3.823181	-30.9884	-5.446376	4.562319	2.704348	-30.93044
NO2_6	-8.588409	-0.562319	-1.408696	-11.60869	0.849274	-13.14493	0.185501	-0.205795	-1.168121	-14.50725	0.608696	-3.24638	-5.333336	1.156517	-3.02319	-1.840584	-3.797104	-3.324638	1.455073	0.849276	-32.91884	2.68985	-33.5855	-11.02319	10.22899	6.608696	-40.72754
NO2_7	-9.385506	1.156525	-2.669565	-10.25797	4.408699	-15.13043	-0.646378	-0.704353	3.973923	-11.74204	5.417389	-3.18261	-2.81739	2.356522	0.347827	0.571014	-1.797104	-2.202896	1.457971	0.240582	-28.34782	3.13623	-21.71014	-3.805797	6.6	3.347826	-39.00578
CH3NHNH2_1	0.67247	0.689857	-0.701449	-0.649277	1.200005	-2.628983	-0.698563	1.449272	-2.286957	0.875366	-0.742035	5.599998	-0.081154	0.313042	0.110146	-0.13913	-0.217392	-0.692753	0.04058	0.130436	-0.342026	-0.182602	0.646362	0.915943	0.182608	-0.113043	2.489853
CH3NHNH2_5	-0.681152	-0.228981	-0.953623	2.026077	1.614494	2.281158	-0.063766	1.771011	-1.568115	1.521744	-3.144928	2.785507	0.599998	0.54203	0.588407	-0.405792	0.67247	0.539131	-0.318841	-0.414494	-0.22319	-0.660873	-0.031876	1.646378	-0.646378	-0.446377	2.272461
CH3NHNH2_2	-0.173912	0.144928	1.002897	-0.298553	1.388405	-1.101456	-1.133331	1.371017	-1.142029	-0.684067	-0.289856	3.675362	-0.17971	0.857971	1.130434	-0.394196	0.568115	-0.828979	0.489855	0.814491	1.605804	-0.527527	0.281158	2.710144	-1.153625	-1.127537	2.965225
CH3NHNH2_3	0.417389	0.475361	0.318841	-0.321732	1.200005	-2.814499	-1.478256	0.704346	-2.666672	0.202896	-1.872467	6.023186	-0.855072	-0.173912	0.237682	-0.533333	-0.50145	0.069565	-0.637681	-0.907246	0.765213	-0.846375	0.472473	1.394201	-0.269566	-0.142029	0.788406
CH3NHNH2_6	-0.136238	-0.228985	-0.544928	-1.22319	-0.049278	-2.608696	-0.878265	0.698551	-3.255066	-1.168121	-0.753624	2.359421	-1.330429	-1.13044	-0.733334	-1.026093	-0.617393	-0.643478	-0.313044	-0.31884	-0.652176	-1.237686	-0.037674	0.692753	-0.130436	0.002899	0.217392
CH3NHNH2_4	0.397102	1.176811	1.176811	-0.721741	1.156517	-4.530434	-0.446381	0.959419	-1.655075	-1.828995	-3.336235	4.776814	-0.005798	-0.031883	1.547826	0.788406	1.855072	1.527536	-0.142029	-0.231884	1.373917	-0.171021	-0.260864	1.063766	-1.594208	-1.455078	2.930435
CH3NHNH2_7	-0.678261	0.965218	-0.110145	-0.3797	2.199997	-4.776802	-0.686951	1.310143	-4.843475	-1.701447	-3.669563	5.4058	-0.382599	-0.892754	0.542029	0.559418	1.44928	0.327538	0.092754	0.368118	0.527527	-0.214493	-0.547836	-0.255074	-2.055073	-1.02029	2.591309

	R01	G01	B01	R02	G02	B02	R03	G03	B03	R04	G04	B04	R05	G05	B05	R06	G06	B06	R07	G07	B07	R08	G08	B08	R09	G09	B09
SO2_1	-0.049278	-0.02319	-0.336232	-1.037674	-0.084061	-0.953621	0.22319	-0.110146	-0.971014	-0.637681	-0.376812	-0.115942	-0.405797	-0.086232	-0.043478	-0.498551	-0.031884	0.571014	0.298551	-0.257971	-4.301453	1.542023	-26.9913	-9.886959	12.77681	4.243479	-51.46086
SO2_2	-0.075363	0.446377	0.344928	0.118835	-0.875366	-0.049271	0.043472	0.118843	-2.31015	-0.217392	-0.402901	-0.110146	0.086952	0.330429	0.655073	-0.226089	-0.182606	-0.730436	0.226087	-0.544928	-2.562317	3.10434	-26.32173	-9.582609	15.07826	6.797102	-51.30145
SO2_3	-0.910141	-0.373913	0.188406	-0.347824	-2.115936	-0.391296	-2.631882	-0.559422	-0.979706	-1.144928	0.017391	-0.678261	-0.678261	-0.739128	0.991304	-0.324638	-0.472466	-0.330437	0.24058	-0.521738	-3.182602	2.713043	-28.14493	-7.573914	11.33044	4.799999	-52.31303
SO2_4	-0.023193	0.017391	-0.173913	1.150726	-0.22319	-0.478256	-0.376816	0.162315	-0.408691	-0.39711	-0.150723	-0.072464	0.243477	0.200005	0.347826	0.655075	0.159424	0.736229	0.536232	-0.144926	-3.156525	4.220291	-26.84638	-9.498552	14.25218	6.03768	-53.44927
SO2_5	-0.886955	-0.269566	0.127536	-1.173904	-0.762321	-0.124641	-1.46666	0.13913	-0.388397	-0.452164	0.411594	-0.127537	-0.620293	-0.663765	-0.31884	0.194199	-0.805794	-0.70145	0.510145	-0.127537	-2.579712	1.426086	-25.05217	-10.00869	11.06087	3.930435	-51.53334
SO2_6	-0.26667	0.626087	0.631884	-0.29274	-0.466667	0.686958	-1.142029	0.028988	-0.713043	-0.544922	0.284058	0.228985	-0.220291	0.130432	0.272465	-0.568115	-0.072464	-0.750725	0.263768	0.162319	-3.623184	2.579712	-28.03479	-5.611594	4.924639	1.2	-46.18262
SO2_7	-0.307243	0.484058	0.165217	-0.382614	0.055069	-0.886955	-0.881149	0.368118	-0.991302	-0.930435	0.4058	-0.29855	-0.797104	0.585503	0.695652	-0.82029	-0.011589	0.701447	0.315942	-0.031885	-1.628983	3.365219	-24.12465	-9.130436	12.26377	4.971016	-51.33913
HCN_1	-2.037682	0.028984	0.173913	-0.730438	0.028984	-4.446381	-0.026093	-0.788406	-0.130447	0.005798	-0.385506	-1.985508	-3.901451	1.00869	-0.939131	0.831879	0.521744	0.431885	0.214493	-0.672464	-16.65508	2.573914	-25.24059	-6.127537	3.686956	-0.739132	-41.88695
HCN_2	-0.782608	-0.040581	0.07826	-1.263763	-0.623192	-4.45507	-0.373917	0.278267	0.171005	-0.055069	0.220291	-0.588406	-5.063766	0.982613	-0.669565	-0.553627	-0.58551	-0.38261	0.278261	-1.220289	-6.263763	2.194199	-15.3942	-4.6029	5.191305	2.478262	-36.66667
HCN_3	-1.391304	0.591305	0.455072	-0.162308	0.411591	-5.028984	0.014496	0.144928	0.110138	0.73912	1.142029	-1.107246	-4.028984	1.692749	-1.744926	0.110146	-0.165222	0.150723	0.26087	-0.486956	-18.44348	4.234787	-36.88406	-7.556522	5.066668	1.889854	-28.08986
HCN_4	-1.840576	-0.046377	0.391304	-1.249268	0.011597	-3.5942	-0.904358	0.420292	-0.176804	-1.507248	-0.211594	-0.147823	-2.011597	0.510147	-0.544928	0.084057	-0.678261	0.313044	0.127536	-1.269566	-16.50435	2.846375	-25.97392	-1.715942	2.002897	-0.373913	-25.37972
HCN_5	-1.17971	0.504349	0.298551	-0.333344	-0.31015	-4.159424	0.142029	0.202896	-0.124634	0.623184	0.133331	-0.692757	-1.368118	1.434784	0.142029	-2.034782	-2.608696	-0.950726	-0.060869	-0.243477	-12.29855	3.249283	-19.89566	-4.257971	4.321739	1.402899	-27.69565
HCN_6	-0.304344	1.057968	0.724638	-1.147827	-1.234787	-4.443474	-0.263763	0.388405	-1.278259	-0.072464	0.70145	-0.582611	-1.257965	1.031883	-0.101449	-0.599998	-1.084061	-0.13913	-0.211594	-1.371016	-14.24059	2.542023	-23.13623	-5.402898	3.701448	1	-25.40579
HCN_7	-0.939125	0.510145	-0.249275	-0.611588	-0.211601	-3.611595	-0.50145	0.18261	-0.243484	0.524643	-0.02319	-0.669563	-0.388405	2.002899	0.208695	1.460869	1.26667	3.049278	0.02029	-0.478262	-4.524628	2.130432	-12.21449	-4.463769	3.959421	1.098551	-29.13335
HF_1	-4.260864	-0.017391	1.220289	-2.110138	0.147827	-12.59421	0.527527	-0.649277	3.060867	-1.504349	0.255074	-0.530434	-12.87246	-1.176811	-1.142029	-1.408691	-0.159416	-0.15942	-0.002899	-1.597101	-7.652176	4.220291	-40.06087	-7.278261	6.486956	2.049274	-33.56522
HF_2	-3.771019	0.275364	-0.084058	-3.898544	1.350723	-9.855072	0.017395	-0.194206	-0.260864	-3.246368	0.443474	-0.489857	-3.976814	1.736237	-0.799999	-0.553619	-0.121742	-0.49855	0.269565	0.127535	-7.936234	2.591293	-32.10146	-5.762318	7.269566	4.144928	-36.24059
HF_3	-1.875366	0.347824	0.597101	-3.307251	1.313049	-8.034782	0.127533	0.411591	2.08696	-2.455063	0.701447	-0.484055	-5.034782	1.344933	-0.678261	-1.197098	-0.191307	-0.713043	0.869565	0.17971	-7.159409	5.208694	-30.53624	-3.4	12.39131	7.605797	-32.15942
HF_4	-3.18261	0.602898	0.478261	-4.246368	1.556519	-7.852173	-0.226074	0.263767	1.492752	-4.028992	0.188404	-0.452175	-6.495651	0.875366	1.069565	-0.924637	-0.382614	0.623192	0.472464	-0.055073	-11.47826	3.460876	-37.48116	-2.231884	3.313044	2.113043	-22.8
HF_5	-4.631882	0.234783	0.962319	-7.173904	2.426094	-11.83189	-0.768112	-0.791298	0.057968	-4.991302	0.773914	-1.930431	-7.594208	1.463768	-1.266667	-1.756523	-0.765221	-1.34203	0.539131	0.362318	-19.02609	5.182602	-48.98261	-9.402898	10.67247	6.944929	-27.21159
HF_6	-4.5942	0.556519	0.342029	-6.376801	2.313042	-12.22318	-0.408691	-0.327538	1.631882	-4.107254	1.527534	-1.895653	-6.072464	0.81739	-0.956522	-1.185509	0.150726	-0.930435	0.733333	0.782608	-16.56232	3.553619	-43.71594	-6.791305	6.640579	3.823189	-25.27827
HF_7	-2.579712	1.11594	1.298551	-4.27536	0.976814	-8.055069	-0.646378	0.568115	0.973907	-4.191299	0.686958	-0.307243	-2.849274	0.968117	0.481159	-1.211594	-0.504349	-0.460871	0.678261	0.449274	-13.05217	5.837677	-49.8232	-6.284059	6.107246	3.846376	-22.83479
HNO3_1	-3.765213	-0.576813	0.295652	-2.194214	-0.478256	-8.628983	-0.750717	-0.440575	-0.884064	0.652176	-0.252171	-1.417393	-17.50145	-2.701447	2.110145	0.002899	2.365219	0.66087	-0.026087	-1.243477	-4.710144	0.982605	-13.44638	-2.626087	2.052174	-0.710145	-19.15942
HNO3_2	-5.898552	-0.18261	1.753623	-1.08696	-0.026093	-7.933334	0.228989	-0.550728	3.246368	1.721741	1.002892	-0.066673	-19.69276	-0.704353	2.21739	0.217392	0.901451	0.373913	0.846377	-0.144928	-1.130432	4.066666	-20.53044	-0.301449	2.197102	-0.359421	-13.57101
HNO3_3	-4.831886	-0.669563	1.507247	-1.014496	-0.023193	-8.034782	-1.292755	-0.330437	0.684052	0.394211	0.646378	-1.156525	-13.91594	-0.640579	1.188406	-0.744934	-0.228989	0.423187	0.115942	-0.713043	-3.269577	2.782608	-13.62608	-0.921739	2.086956	0.084058	-16.58841
HNO3_4	-3.765213	-0.576813	0.295652	-2.194214	-0.478256	-8.628983	-0.750717	-0.440575	-0.884064	0.652176	-0.252171	-1.417393	-17.50145	-2.701447	2.110145	0.002899	2.365219	0.66087	-0.026087	-1.243477	-4.710144	0.982605	-13.44638	-2.626087	2.052174	-0.710145	-19.15942
HNO3_5	-4.026085	-0.179707	1.437681	-0.350739	-0.18261	-7.223183	-0.495651	-0.791306	2.020279	2.031876	0.4058	-1.231888	-13.43478	-1.063774	1.249275	-0.597099	-0.411598	-0.008694	0.075362	-0.965218	-1.330429	2.226089	-7.736221	-0.026087	1.594204	-0.521739	-13.4087
HNO3_6	-2.852173	0.066666	1.321739	-1.069565	-0.194199	-7.168114	0.794205	-0.295647	1.373917	0.776825	0.73333	-0.005791	-13.28406	-0.910141	1.817391	0.475357	0.057968	0.089855	0.571014	-0.208694	-1	1.86087	-6.898544	-0.884058	2.211594	-0.550725	-12.95941
HNO3_7	-2.863762	-0.527538	0.4	-0.982605	-0.742027	-6.510139	-0.22319	-1.272461	0.869568	1.13623	0.881165	-0.298553	-11.08406	-0.742027	0.382608	2.260872	2.426086	4.973915	0.211594	-0.336231	-2.052185	0.982605	-4.553619	-2.168116	1.585508	-0.211595	-9.388405
Hydrazine_1	-6.336227	-1.037678	1.06087	-0.292755	0.620293	-1.611595	-0.469574	0.611595	-1.927536	-1.605789	-1.289852	2.136234	-0.686958	-1.037682	0.518841	-0.089859	3.327538	-0.150726	-0.162319	-0.046375	-0.13623	-0.715942	1.840576	1.65797	-2.753624	-1.214493	3.869568
Hydrazine_2	-5.800003	-0.66087	0.944927	-0.17392	0.14782	-0.101448	0.373917	0.962318	-2.10434	-0.631897	-0.7971	3.098549	-1.846382	-1.773911	0.611594	-0.747826	2.228989	0.043478	0.095652	0.156521	0.402893	0.301453	1.681168	1.965218	-2.542027	-1.13623	4.347824
Hydrazine_3	-5.057968	-0.547825	0.234782	-0.547821	0.147827	-0.028992	0.260864	0.075363	-1.304344	-0.41449	-0.539131	0.773912	-0.197105	-0.904346	0.623188	-0.663765	1.634785	-0.110144	-0.107246	-0.086958	0.040573	-1.043472	1.205795	1.440578	-2.194204	-0.466667	5.41449
Hydrazine_4	-6.666672	-0.956524	1.055073	-0.73912	0.843475	-1.327538	0.026093	0.988403	-3.002884	-1.515945	-2.443481	4.68116	-1.50145	-1.620285	0.556521	-0.043472	2.802902	0.753622	-0.35942	0.689857	0.614487	-0.550735	2.171021	2.672462	-2.756523	-1.17971	3.820297
Hydrazine_5	-9.50145	-1.539131	1.808695	-0.562317	1.121735	-2.066666	0.553619	0.715942	-2.063766	-0.939133	-1.307243	3.97971	-1.411591	-2.852173	1.24058	-0.081161	2.994202	0.904348	0.124638	0.507244	0.924637	-0.014496	1.36232	2.144926	-1.307243	-0.92174	5.67247
Hydrazine_6	-14.30435	-1.585506	2.724638	-0.376816	1.153625	-1.240578	-0.460876	2.173912	-2.881165	-0.994202	-2.857971	4.292755	-1.933334	-2.234779	0.733334	-0.107246	3.23188	0.127537	0.197102	0.249275	1.626083	-0.794205	1.663773	2.084059	-2.933334	-1.228985	5.846375
Hydrazine_7	-13.04637	-1.368118	2.828985	-0.356522	1.797104	-1.611595	-0.991302	1.205795	-3.150726	-1.617401	-2.765221	5.782608	-2.310143	-3.944931	1.701448	-1.249275	2.913048	-0.400002	0.086957	-0.2029	1.391296	0.25798	1.072464	2.715942	-3.443478	-2.173912	4.991318

	R10	G10	B10	R11	G11	B11	R12	G12	B12	R13	G13	B13	R14	G14	B14	R15	G15	B15	R16	G16	B16	R17	G17	B17	R18	G18	B18
Control_1	-0.301449	-0.243477	0.507248	-0.289855	0.310143	0.037674	-0.324638	0.214493	-2.072464	0.652186	0.089855	1.282899	0.417758	0.236328	0.084239	0.085507	0.049274	0.663768	-0.284058	0.315948	0.075359	0.710144	0.536224	0.257973	-0.084061	-0.272461	-2.356522
Control_2	0.075362	-0.205795	-0.513046	-0.034783	-0.156521	0.60289	0	-0.104347	1.423187	0.078262	0.321732	1.495667	0.979706	-0.881149	-0.173914	0.202896	0.072464	0.330435	0.144928	-0.339142	0.17971	0.371017	-0.202896	0.672464	0.547821	0.043472	0.240585
Control_3	-0.142029	0.052174	-0.246384	-0.075362	0.68116	0.597107	0.014493	0.081161	-0.01738	-0.27536	-0.228989	1.594208	-0.32753	0.568115	-0.698551	-0.791306	0.333333	-0.292753	-1.263779	0.226074	0.275363	-0.220291	-0.118851	-0.023189	-0.336243	0.365204	-0.437683
Control_4	-0.107246	0.066669	0.194199	0.092754	0.011597	-0.020279	0.002899	-0.449272	-0.260864	0.820297	0.678268	0.217392	0.405792	-0.063782	0.373913	0.742035	-0.153624	0.153623	-0.127533	-0.58551	0.397101	1.63768	0.301453	0.026087	-0.399994	0.307236	-0.017395
Control_5	1.185507	0.385506	0.527542	0.501449	-0.098553	1.072464	0.086957	0.800003	1.142029	0.698547	0.124634	0.356522	0.342041	-0.089844	-0.426086	0.350723	-0.110145	0	0.55072	-1.08696	0.826088	1.081161	0.617386	0.431883	0.927536	0.002899	0.924637
Control_6	-0.304348	-0.347824	1.510147	-0.086957	-0.423187	0.371017	-0.049275	-0.075363	0.611588	-0.89856	-0.614502	3.298553	-0.153625	-0.026093	0.417393	-0.228989	0.237681	0.049275	-0.492767	-0.481171	1.089855	-0.698547	0.779709	2.623188	1.495651	0.884048	2.759415
Control_7	-0.014493	-0.246376	1.559418	0.208696	0.040581	-0.968109	0.028986	-0.13913	0.579712	-1.055069	0.484055	-0.333328	-0.066666	0.41449	-1.507246	-0.205795	-1.333332	-0.860868	-0.226074	-0.704361	0.76232	-0.298553	1.773911	0.976812	0.246384	1.278259	1.385513
HCHO_1	0.171015	0.243477	0.921738	0.298551	-0.023186	-0.527527	-0.014492	0.144928	-0.834778	0.79129	1.159424	-1.031891	0.255081	0.640579	0.997101	0.591309	0.049276	-0.197102	0.739136	0.263779	0.472462	0.852173	0.933334	1.205797	0.391296	0.510147	-0.8116
HCHO_2	-0.110142	-0.060867	0.98262	-0.078261	-0.231884	-0.481155	-0.228985	0.008698	1.252182	0.530441	0.031876	2.342041	0.785507	-0.660858	-1.243477	0.284058	0.185509	-0.620291	-0.376816	-0.600006	-0.09565	0.536224	-0.440582	0.597101	-0.956512	0.095642	0.826096
HCHO_3	-0.046377	0.240578	0.666672	-0.069565	-0.014492	-1.591309	0	-0.197098	-0.475357	-0.266663	0.27536	1.805786	-0.721741	0.179718	-0.811596	0.478256	0.139131	0.327536	-0.600006	-0.243469	0.057971	-0.27536	0.075363	0.518841	-0.156525	-0.014488	0.298553
HCHO_4	-0.191304	0.252174	-0.10144	-0.26087	-0.037682	-0.168121	-0.408695	-2.255074	-1.72464	-1.281158	-0.426086	2.652176	-0.730423	-0.307236	0.678261	0.03479	0.481159	-0.092752	-1.376816	0.336227	0.65797	-0.194214	-0.718842	0.014492	-0.426086	0.559418	-0.026077
HCHO_5	-0.371014	0.31884	-0.411606	0.014493	0.101448	0.808685	0.014493	-0.075363	0.014496	-0.469574	0.339127	0.8116	-0.13913	0.559418	-0.489853	-0.028992	0.2	-0.127536	0.315948	-0.292755	0.243478	0.939133	0.127533	0.608696	0.823196	0.678268	1.41449
HCHO_6	0.04058	0.046375	-0.263779	0.15942	0.107246	-0.263779	0	-0.257973	2.243484	0.50145	0.58551	1.046371	1.359421	-0.144913	0.400002	1.208694	0.156522	-0.382609	-0.008698	0.005798	-0.113043	0.704346	-0.13913	-0.043478	0.460876	1.165222	1.17392
HCHO_7	0.942029	0.640587	1.394211	0.417391	0.310143	-0.959427	0.037681	0.426086	-0.828995	0.313049	1.03479	1.484055	0.678268	0.869553	2.898552	1.017395	1.286957	0.979711	-0.278259	0.872452	1.620289	2.156525	1.46376	1.869564	0.243484	-0.031876	-1.066666
Arsine_1	0	-0.156523	0.426086	0.052174	0.127535	-0.773911	0	-0.104347	0.194214	0.428986	1.646378	2.037689	0.159424	0.26088	0.747826	-0.017387	-0.591304	-0.330435	-0.084061	0.281158	0.104348	-0.492767	0.901451	-0.017391	0.066666	0.376801	0.631889
Arsine_2	0	0.118843	-0.620285	-0.101449	0.2029	-1.017395	-0.014493	-0.310143	-1.055069	-3.46666	-3.666672	-2.243484	-1.194214	-0.069565	-0.043478	-0.756523	0.005797	0.084058	-0.843475	-0.489853	-0.289855	-1.382614	0.321739	0.011594	-1.391296	0.269562	-0.431885
Arsine_3	-0.011594	0.005798	0.257973	-2.011594	-1.434784	0.484055	0.86087	1.289856	-0.159424	-0.156525	-1.092743	-0.147827	-0.463776	-0.600006	-0.171015	-0.324638	-0.002899	-0.084058	-0.956528	-0.263763	0	-0.657974	0.252174	0.014493	-0.072464	-0.234787	-0.965218
Arsine_4	0.028986	0.330435	0.881157	0.121739	0.118839	1.020279	0.002899	-0.06377	0.718842	1.698547	0.6203	1.36232	0.39711	0.840576	-0.33913	0.402893	0.046377	-0.046377	1.22319	0.518845	-0.24058	0.84639	-0.649269	-0.086957	-0.620293	-0.171013	-1.45507
Arsine_5	0.002899	0.313044	0.318832	0.2	-0.049274	1.408707	-0.057971	-0.281158	-1.05217	-0.84639	-1.889862	-5.846375	0.663773	0.942032	0.536232	0.773918	0.057971	-0.046377	1.002899	0.901443	0	0.402893	0.55072	0.049275	0.437683	0.669556	-0.205795
Arsine_6	0	-0.321739	1.240585	0.078261	-0.011593	-0.402893	0	-0.220291	-1.026077	0.428986	1.13913	2.423187	-0.837677	-0.428986	0.017391	-0.431885	0	0.002899	-0.936234	-0.469559	0	-0.678253	-0.68116	0	-1.45507	-0.721741	-0.785507
Arsine_7	0.069565	0.49855	1.405792	0.049275	-0.15942	0.046371	0	-0.463768	-0.324646	0.985504	-0.214493	-0.802902	0.530426	0.36232	0.046377	1.118835	0.043478	-0.182609	0.437683	0.886963	0.756522	-0.313049	-0.382614	0.228985	-0.460876	-0.153625	-0.736221
Phosphine_1	0.011594	0.002897	-0.547821	0.037681	-0.643476	-1.431885	-0.026087	-1.147827	-2.924637	-0.773911	0.072464	-0.05217	-0.547821	-0.217392	-0.704348	0.008698	-0.052174	-0.234783	-0.255066	-0.794205	0	-0.631882	-0.347832	0.156522	-0.257965	-0.579712	-1.515938
Phosphine_2	-0.031884	-0.084057	-0.286957	-0.075362	0.205797	-1.605789	0.075362	-0.304348	-0.588409	-2.255081	-1.22319	0.101456	-1.339142	-0.765228	-0.121739	-0.649277	0.434782	0.031884	-0.115936	0.171013	0	-0.568115	-0.31884	0	0.13623	-0.359421	-0.524643
Phosphine_3	-0.002899	-0.139132	0.240585	0.286956	-0.263767	-1.127533	-0.014493	-0.191299	-1.924637	2.614502	3.385513	1.469559	0.350723	0.588409	0.234783	-2.194206	-1.214493	-1.110145	-0.565216	-0.330437	0.118841	-0.379715	-0.205795	-0.011594	-1.353622	-0.976814	0.110146
Phosphine_4	-0.002899	0.037682	-0.315941	0.072464	0.162319	-2.037689	-0.956522	-2.234779	-1.982605	-1.8116	-1.371017	1.942032	0.223175	-1.147812	-0.382609	0.547829	-0.014493	-0.005797	-1.272461	-0.211594	-0.13913	-0.768112	-0.440582	0	-0.034782	-1.26667	-0.800003
Phosphine_5	0.191304	-0.12174	0.107246	0.066667	-0.095652	-2.104355	-0.014493	-0.750725	-2.800003	0.037674	-0.147827	-0.91304	-1.339127	-0.466675	-0.443478	-0.394203	0	0.055072	-1.078262	-0.707245	0.127536	-1.455063	0.031883	0	-1.217392	-1.428986	-0.515945
Phosphine_6	-0.023188	-0.881159	-0.075363	0.142029	-0.237682	-1.65506	-0.107246	-1.173912	-1.933334	-1.066681	-1.72464	-3.701447	-1.066666	-1.188416	-0.086957	-1.460869	-0.026087	0.002899	-1.58551	-1.718842	0	-1.666656	-0.547821	0.127536	-1.457977	-1.411591	-1.733337
Phosphine_7	0.014493	-0.237682	0.005791	0.002899	-0.272465	-0.623184	-0.011594	-0.72464	-1.182602	0.162308	-0.77681	-0.536232	0.191315	-0.318832	-0.089855	-0.382607	-0.026087	0.185507	-0.666672	-0.553627	0.017391	-1.6203	-0.217392	0.191304	-1.307251	-0.997101	0.078262
Diborane_1	-0.011594	-0.272465	0.333328	-0.008696	0.42029	-4.086945	-0.089855	-0.379707	-1.385498	0.214493	1.113052	1.368103	0.226089	0.985504	0.104347	2.634781	2.142029	1.304348	0.86087	1.46376	0.002898	0.692749	0.524643	-1.176812	1.237686	0.901459	2.953629
Diborane_2	-0.002899	-0.486956	-0.08696	0.327536	0.078259	-5.655075	-0.011594	0.188408	-4.142029	3.562317	4.41449	2.127533	-0.808701	0.933334	0.286956	3.74202	3.6	2.310145	0.660873	0.118835	0	1.301453	0.58551	0.104348	0.715942	1	0.492752
Diborane_3	-0.017391	0.228985	0.921753	-0.17971	0.011595	-6.240585	-0.008696	-0.286957	-3.695663	0.023178	0.495651	0.014496	0.368118	-0.797104	0.110145	-0.379715	0.02029	-0.04058	-0.046371	0.544922	0	0.524643	0.060875	0.005797	-0.440582	-0.005798	0.014496
Diborane_4	-0.014494	-0.576813	0.814499	0.411594	-0.115942	-4.936234	0	-0.295654	-5.443481	0.646378	2	0.944916	-0.243484	0.475357	-0.904347	0.791306	0.37971	0.005797	-0.173904	0.678268	-0.026087	0.805801	0.385506	0	-0.400009	-0.199997	-0.533333
Diborane_5	-0.011594	-0.171015	-0.54493	0.208696	0.368116	-6.402893	0.005797	-1.02029	-3.721741	-0.939133	-0.150726	1.292755	-0.379715	0.46376	-0.330434	0.530434	0.084058	0.104348	-0.026093	0.611588	-0.046377	-0.681168	-0.034782	0.147826	-0.330437	-1.017387	-0.086952
Diborane_6	-0.011594	-0.86087	-1.191299	0.037681	-0.333334	-5.953613	0	-0.90435	-5.385513	-1.765228	-0.727524	2.173904	-0.58551	-0.150711	-0.304348	0.585503	-0.008696	0.011594	-0.069565	-1.159409	0	-1.542038	-0.469559	0	-1.379707	-0.553627	-0.37101
Diborane_7	-0.014493	0.704346	1.692749	0.298551	-0.104347	-4.243469	0.002899	-0.759422	-3.426086	2.466675	1.568115	4.86377	0.826096	0.907242	1.727537	1.547821	0.602899	0.434783	0.055069	1.171005	0.002899	0.142029	1.388412	2.173913	-0.324646	0.023193	0.188416
H2S_1	0.066667	0.486958	-1.214493	2.950725	6.034782	-69.82898	0.008696	2.50145	-27.15363	0.721725	0.834778	1.455078	0.686951	0.431885	0.142029	0.823196	0.507246	-0.037681	0.27536	0.44928	-0.197101	0.266663	0.623184	-0.286957	0.971008	0.600006	-0.452164
H2S_2	-0.008696	-0.881157	-1.342026	3.866667	5.994202	-71.34203	0.124638	1.771011	-26.26088	0.266663	0.727524	3.295654	1.066666	0.081161	0.286957	0.765228	0.63768	-0.150726	0.89566	-0.800003	-0.350725	-0.246384	-0.536224	-0.646377	0.84639	-0.153625	-0.226089
H2S_3	-0.086957	0.017391	-1.32753	5.095652	5.814491	-73.11885	1.776811	4.052177	-29.57391	0.040573	0.26088	3.110138	0.811584	0.434784	0.344927	1.298553	1.47826	0.669565	0.553619	0.907257	-0.028986	0.721741	0.36232	-0.052174	0.162323	1.26088	-0.910141
H2S_4	-0.237681	-0.846378	-1.710144	3.727536	3.724636	-68.9971	-0.736232	0.855072	-24.75653	0.559418	0.721741	1.284058	-0.226089	-0.588409	-0.907246	0.179718	1.130434	1.24058	-1.339127	-1.13623	0.281159	-1.226089	0.765213	0.678261	-0.72464	-0.359421	-1.446365
H2S_5	-0.011594	0.066666	0.107239	4.008696	7.855076	-72.25798	0.014493	1.54203	-25.36812	0.298553	1.295654	1.089859	-0.330429	0.753632	-0.49855	-0.765213	-0.991306	-0.753624	-0.443466	0.344925	-0.747826	0.359421	0.359421	1.24058	0.150726	0.730438	-0.150726
H2S_6	-0.246377	-0.585506	0.257965	4.188406	5.727535	-65.63188	0.057971	1.736229	-25.97391	0.142029	0.05217	3.153625	0.721741	-0.084045	0.10145	0.649277	1.208696	0.484057	0.072464	0.069565	-0.095652	0.826096	0.255066	-0.550724	-0.318832	0.385498	-1.002884
H2S_7	0.437681	0.695652	0.249268	3.315942	3.933332	-68.92464	0.44058	3.049271	-26.04059	-0.194214	-1.057968	1.156509	-0.730438	0.51593	0.327538	-0.063766	-0.872463	-1.278261	0.834778	0.692749	-0.005798	0.762314	-1.75943	-4.973913	0.081161	0.011581	0.008698
(CH3)2NH_1	-0.333333	-0.539131	-0.037689	-0.098551	-0.576805	1.118835	-0.075362	0.156525	-0.301453	5.133331	-8.197098	-97.66957	-141.8638	-90.51014	61.85217	-0.484055	7.530434	2.063774	-103.0029	-90.71594	26.97391	-115.0667	-80.00291	30.36522	-10.16522	-18.88695	12.36522
(CH3)2NH_2	-0.336232	-0.634781	1.028992	0.002899	-0.921738	1.86377	-0.202899	-0.779709	-0.74202	3.753616	-7.608688	-84.18261	-138.5333	-90.77102	54.6	2.675369	8.597103	0.405796	-95.36233	-81.21738	23.06957	-119.6261	-82.10146	30.95073	-10.77681	-20.58841	9.956528
(CH3)2NH_3	-0.04058	-0.075363	1.559418	-0.098551	-0.547825	-0.394211	-0.017391	-1.081161	0.475357	3.985504	-7.046371	-90.68696	-142.571	-94.9913	56.07826	-0.098557	10.54493	2.353622	-99.94783	-85.59711	25.46377	-124.4435	-88.59999	34.6058	-11.0087	-22.84057	12.58261
(CH3)2NH_4	0.130435	-0.539131	0.988403	0.147826	-0.017391	2.631897	0.046377	0.118843	0.794189	6.159409	-8.973923	-106.1971	-143.6435	-93.72463	60.51594	-0.089859	8.742027	3.255074	-101.5681	-87.78552	25.96812	-114.3913	-79.36812	31.87536	-10.21159	-21.65217	12.56233
(CH3)2NH_5	0.231884	0.217392	0.817383	0.188406	-0.298553	2.753632	0.136232	-0.295654	0.014496	6.600006	-6.452164	-89.829	-140.4667	-92.90725	58.72754	2.107239	11.64058	2.486958	-100.1391	-87.90144	27.26087	-121.2986	-82.73623	32.25217	-10.51595	-21.4232	12.80869
(CH3)2NH_6	-0.521739	-0.74493	-0.34494	-0.142029	-0.921741	1.649277	-0.17971	-1.976807	-0.197098	3.582611	-8.843475	-98.10435	-141.1449	-92.09855	58.52174	-0.03479	10.06087	3.669567	-99.37392	-87.34783	26.6029	-112.8725	-79.47826	32.26377	-11.06087	-22.96233	11.10434
(CH3)2NH_7	-0.205797	-0.057972	0.127533	-0.031884	-0.426086	2.005798	0.115942	0.336235	0.840576	5.057983	-7.41449	-91.46377	-142.6058	-94.71884	57.84638	1.808701	10.77102	5.591301	-98.30435	-85.15072	25.14203	-116.9681	-84.24347	33.85217	-10.3884	-20.54492	12.54202
(CH3)3N_1	-0.504348	0.017391	1.321747	-0.313044	-0.857971	1.86087	-0.084058	-0.782608	-0.785507	2.292755	-2.747833	-50.7971	-80.10725	-39.84638	19.20869	-1.727539	0.571014	-0.066666	-4.428986	-2.77681	1.026087	-48.75072	-21.23479	7.031884	-10.0145	-15.25797	8.547821
(CH3)3N_2	-0.162319	0.13913	0.182602	0.281159	-0.118835	1.782608	0.017391	-0.486961	0.843475	2.791306	-3.49855	-58.97392	-76.28406	-36.9855	20.45797	-0.60289	2.881157	1.455078	-4.74202	-3.718826	2.359419	-51.07826	-25.76811	10.46957	-9.118835	-14.13044	11.10144
(CH3)3N_3	-0.098551	-0.188404	1	0.17971	-0.907242	1.460876	0.023188	-0.489853	0.602905	5.078262	-2.133331	-57.65797	-74.27247	-36.36232	20.50145	0.715942	2.031883	-0.385509	-1.997101	-0.27536	0.53913	-47.31885	-21.63768	7.257971	-8.930435	-14.80869	11.15942
(CH3)3N_4	-0.55942	-1.27536	-0.886948	-0.718841	-1.313042	0.48407	-0.559421	-1.800003	-1.855072	1.133331	-3.684052	-56.88695	-74.22028	-37.73622	15.94203	-1.481155	3.295654	-0.936234	-6.255081	-5.614487	1.431883	-46.22899	-23.07247	7.115942	-10.0087	-16.73914	6.220291
(CH3)3N_5	-0.173913	-0.359421	0.756531	-0.113043	-0.86377	1.382599	-0.026087	-0.515945	0.695648	2.973923	-2.388412	-52.35072	-84.84637	-44.12463	23.54203	-1.162323	2.208694	0.924637	-16.66086	-13.75072	5.652174	-68.24348	-38.82899	14.01449	-8.037674	-14.83478	10.32755
(CH3)3N_6	-0.414493	-0.643478	-0.971008	-0.089855	-0.449276	-2.133331	-0.002899	-0.713043	-0.973907	1.94783	-2.956528	-49.67535	-82.66666	-43.16232	20.82609	-1.623184	0.582611	0.028988	-18.3855	-14.93622	3.84058	-72.26087	-41.37102	14.06087	-9.298538	-17.75072	9.243469
(CH3)3N_7	-0.292754	-0.220287	0.434784	0.113044	0.217392	-0.437683	0	-0.385506	-0.959427	2.730438	-2.591293	-49.73044	-79.95941	-41.12755	19.96232	-0.707245	1.814491	-0.269569	-11.51885	-7.982605	3.243479	-73.1826	-39.77391	14.03478	-8.037689	-14.88985	9.301453

	R10	G10	B10	R11	G11	B11	R12	G12	B12	R13	G13	B13	R14	G14	B14	R15	G15	B15	R16	G16	B16	R17	G17	B17	R18	G18	B18
Ammonia_1	-0.492754	-0.744926	0.15361	-0.136232	-0.991306	0.892761	-0.011594	-1.472466	-0.473668	-5.786597	-11.59121	-126.6405	-153.4858	-98.68811	68.18424	-0.846375	3.49855	1.597099	-92.13624	-75.09565	21.57681	-136.2986	-96.81739	38.82898	-21.1971	-40.14493	23.70435
Ammonia_2	-0.005797	-1.095654	-0.579712	0.037681	-1.171013	0.095642	0.005797	-1.849281	-3.675354	6.292755	-11.39131	-126.8029	-153.9884	-98.23189	68.1884	-0.846375	3.49855	0.666668	-86.81158	-70.57682	18.84638	-127.7304	-90.03189	36.44348	-19.94202	-38.36812	20.14493
Ammonia_3	0.165217	-0.281158	-0.884064	-0.336232	-2.026089	2.304337	-0.133333	-1.530434	-0.48407	4.89856	-13.43768	-135.8638	-162.9913	-103.7739	69.14783	3.301437	5.782608	-0.942029	-77.29276	-60.52464	14.86087	-131.2232	-86.16522	31.27826	-19.14783	-28.11305	18.69566
Ammonia_4	-0.397101	-1.118843	0.194199	0.057971	-0.449276	1.208694	-0.008696	-0.504349	0.976822	6.420303	-10.68405	-128.6145	-156.971	-97.44059	68.31594	-1.463776	4.385506	3.020294	-81.18261	-65.51884	16.76812	-130.1101	-89.24637	34.75362	-19.28116	-35.88406	22.26378
Ammonia_5	0.136232	0.165215	0.168121	-0.156522	-0.385509	2.13913	0.008696	-0.944923	-0.399994	5.295654	-10.68985	-127.7971	-155.5188	-97.45796	63.64348	-1.77681	4.765213	1.127537	-78.65218	-61.67536	16.43478	-123.2058	-82.52463	32.94203	-17.73624	-37.67825	23.41449
Ammonia_6	-0.788405	-0.907246	-1.634781	-0.315942	-2.330437	1.36232	-0.188406	-1.579712	-1.171005	4.182602	-11.53333	-123.8754	-153.6667	-95.55072	62.08986	-1.698547	7.005798	2.324638	-76.47537	-59.22028	15.02898	-125.6348	-85.48695	30.42609	-17.84638	-30.92464	14.88695
Ammonia_7	-1.136232	-0.376812	0.718842	-0.028986	-0.27536	4.17392	0	1.246376	2.165207	3.814499	-10.62898	-112.8116	-137.3507	-88.73332	59.98261	-0.918854	3.692757	1.921738	-76.46377	-60.67247	15.4	-112.0609	-82.83478	31.27826	-13.95361	-29.34493	22.09566
HCl_1	2.76232	5.457973	-41.6058	5.046377	14.90435	-82.87825	0.594203	7.715942	-51.76521	0.13913	-0.315948	-22.1942	2.228989	1.886963	0.605799	-0.020294	-5.684059	1.266666	0.695648	-6.376816	3.336232	2.408707	-1.113052	0.852174	4.820297	5.826096	-5.79129
HCl_2	10.03188	11.63188	-41.85217	10.4058	25.24927	-83.52463	24.09275	14.18262	-52.55653	1.623199	0.765228	-23.43477	3.678253	1.956512	5.559422	0.144928	-5.257973	0.402901	-0.095657	-2.649277	3.307247	5.733337	-0.568115	4.681158	7.469574	5.814484	-6.228989
HCl_3	6.544927	8.791306	-47.05217	8.06087	18.77681	-80.44637	3.991304	9.626083	-50.50725	1.376816	0.634781	-23.23479	1.44928	1.814484	5.324638	1.779724	-3.475365	1.730434	0.704346	-3.936234	2.037682	6.762314	0.373917	3.04058	7.701462	8.710144	-5.831879
HCl_4	13.9942	15.33913	-57.83188	14.25507	28.45218	-79.68115	12.73913	8.857971	-50.0145	-1.063766	-0.27536	-29.20869	-0.13913	0.298553	4.29565	-1.057968	-8.159424	0.655075	-1.698563	-6.681152	4.530435	1.507248	-2.846375	5.286957	4.385513	4.846375	-8.849274
HCl_5	6.231884	8.631886	-40.51015	7.069565	16.74203	-75.46376	5.872464	7.846375	-52.95941	0.942032	1.431885	-14.74202	1.304337	0.791306	3.878258	0.50145	-6.428986	1.649277	-0.707245	-4.553635	0.788405	3.049271	-0.991302	3.124638	5.147827	5.785507	-7.252167
HCl_6	14.78261	17.91304	-62.14204	9.275362	21.42609	-80.16812	36.2	17.24638	-57.94782	2.527542	-0.17392	-32.04927	3.095657	3.347824	3.823189	0.733337	-6.866669	1.571014	-0.342026	-4.907242	4.997101	4.455063	-1.457977	2.504347	5.828995	5.521729	-6.58551
HCl_7	5.57971	7.826092	-37.35073	6.823188	20.85797	-82.75653	6.828985	10.88406	-55.53334	-2.394211	-2.58551	-31.73044	-2.60289	-1.72464	3.515945	-2.098557	-11.18261	-1.005798	-1.31015	-5.310135	2.866667	3.579712	-2.742035	3.133335	5.782608	7.31015	-8.994202
(CH3)NH2_1	-0.562319	-0.907242	1.060867	-0.481159	-3.884056	8.008698	-0.762319	-1.011597	-0.924637	4.614487	-8.344925	-94.93624	-133.658	-77.65507	54.95653	-2.243484	5.515938	2.965218	-74.11015	-60.01449	18.4029	-112.1159	-74.31884	30.74493	-13.28406	-23.15363	11.31014
(CH3)NH2_2	0.057971	0.031883	-0.272476	0.336232	-0.49855	1.86087	0	-0.782608	-0.718842	3.739136	-5.39711	-80.04347	-149.771	-88.35072	50.84348	0.77681	8.49276	0.600002	-78.51015	-55	15.06087	-111.487	-73.75073	28.53043	-9.304352	-13.15071	0.162323
(CH3)NH2_3	-0.695652	0.046379	0.318848	-0.756522	-3.971016	9.127533	-1.133333	-0.707245	2.713058	4.191299	-8.228989	-85.24928	-123.9623	-77.16811	64.61449	4.179703	11.73623	0.133333	-85.94202	-73.64059	25.13044	-98.50435	-71.81449	30.43478	-9.895645	-19.9971	11.85217
(CH3)NH2_4	-0.449276	-0.663765	-0.194214	-0.681159	-4.27536	9.107254	-0.333333	-0.794205	1.655075	5.121735	-9.434784	-104.6261	-145.0522	-89.29565	54.08696	1.023178	11.4087	2.513042	-71.49566	-55.84927	16.33623	-114.2493	-73.85217	28.50435	-12.04637	-23.83189	13.52173
(CH3)NH2_5	0	0.176811	0.037689	0.176812	0.095654	0.904343	-0.005797	-0.605797	0.072464	4.304352	-2.623184	-65.40869	-151.2058	-85.66087	39.82319	0.107239	5.266666	0.171013	-61.02898	-31.9855	4.008696	-101.8319	-57.15363	16.38551	-8.040581	-11.23478	2.359421
(CH3)NH2_6	-0.173913	-0.571014	-0.63768	0.011594	-0.597099	2.072464	-0.043478	-1.017395	-0.623184	3.739136	-6.72464	-85.96522	-153.1044	-89.45217	50.07246	1.49855	7.434776	0.037682	-85.96232	-65.02898	17.79421	-110.0783	-65.34493	21.08116	-6.82608	-10.02319	-0.840576
(CH3)NH2_7	-0.014493	-0.055073	0.513046	-0.037681	-0.463768	0.852173	0	-0.759422	-0.507248	3.075363	-5.695648	-74.44638	-154.7072	-90.62898	48.92464	1.481155	5.260868	-0.489855	-73.38841	-44.67536	8.623188	-113.5159	-62.44637	17.29275	-8.872467	-12.04927	-1.446365
Cl2_1	2.710145	3.307243	-8.417389	4.646377	9.310143	-7.805801	13.69855	6.727539	-7.344925	0.124634	-0.281158	0.846375	1.530441	0.579697	0.54203	0.202896	3.278259	2.110146	0.05217	-0.336227	0.649277	1.023193	-0.211594	0.376812	4.220291	6.565216	0.231888
Cl2_2	2.605799	4.289856	-9.10434	4.973913	13.0116	-6.084061	17.37971	9.020294	-7.214493	-0.092743	0.481171	1.376816	-0.031876	0.715942	1.373917	1.231888	4.101448	1.860863	-0.565216	0.095657	0.791306	0.469559	-0.295654	0.252174	4.327545	6.13913	-0.194214
Cl2_3	4.237681	5.652176	-16.43189	2.814493	10.58261	-5.79129	8.153623	6.17392	-3.214493	-1.402893	-1.79129	-1.837677	0.681152	0.260864	-0.130432	-0.420288	4.771019	1.055077	-0.588409	-0.718842	1.455072	1.50145	-0.034775	0.652174	3.428986	7.782608	2.579712
Cl2_4	2.402899	3.269569	-8.185516	5.217391	11.72754	-7.63768	12.41449	6.994202	-6.368118	-0.342026	-0.582611	-0.997101	-0.513046	-0.272461	0.686958	-0.875366	4.872467	2.660866	-0.982605	-1.315948	-0.031883	1.031876	0.373917	-0.8	3.524628	6.994202	0.344925
Cl2_5	3.269566	4.976807	-11.2058	4.991304	12.17681	-5.324631	14.28406	8.144928	-4.408691	0.588409	1.649277	0.272461	1.159424	0.591293	1.011593	-0.452179	3.730431	1.156525	0.252182	-0.594208	2.278263	1.339127	0.457977	0.463768	5.252167	7.202911	0.953629
Cl2_6	5.124638	6.828987	-14.52174	5.849275	13.07536	-7.202911	18.14493	8.852173	-7.94783	0.802902	1.156525	0.704346	0.1884	0.730423	0.715942	0.652176	6.263763	3.513039	0.489853	0.220291	0.269566	0.791306	1.008698	-0.228985	4.333328	6.663757	-0.866669
Cl2_7	3.057971	3.666664	-7.475357	13.58551	16.70435	-3.785507	18.69275	9.286957	-3.521744	-0.753616	-0.199997	0.718842	0.405792	0.985504	1.101448	0.747818	4.50145	1.626091	-0.194199	-0.762314	0.823189	2.115936	0.460861	-0.347826	5.234787	9.234772	-0.249268
Phosgene_1	0.234783	0.518841	-1.657974	0.489855	0.834785	-5.492752	0.336232	0.898552	-3.678253	-1.368118	-0.069565	-0.513031	0.649277	-0.057968	0.008696	0.655075	0.617391	0.130435	-0.573914	-0.481155	0.765217	0.579712	-0.484055	0.327536	0.371017	0.62899	1.13913
Phosgene_2	0.043478	0.588402	-1.933334	0.652174	1.211594	-5.982605	1.417391	0.973915	-5.066666	0.005798	-0.855072	0.391296	-0.171021	-0.298553	1.098549	1.043472	-0.391306	-0.214493	-0.405807	0.820297	-1.527536	-0.426086	0.385513	-0.33913	0.168121	0.144928	-0.43187
Phosgene_3	-0.42029	-0.226086	-1.469559	0.626087	1.040581	-4.617386	1.892754	0.226089	-6.353622	0.715942	0.837677	4.060867	-0.194199	-0.846375	-0.008694	-0.052185	-0.034782	0.353622	-0.701462	-0.968124	-0.408697	-0.985504	-0.318848	0.620291	-1.171005	0.084061	-1.086945
Phosgene_4	-0.631885	-0.211594	-3.185501	0.397102	0.286957	-7.055069	1.257971	-0.852173	-7.408707	-0.965225	-0.739136	-1.028976	-1.568115	-1.284058	-3.101448	-1.614502	-0.997101	-1.443481	-1.295639	-1.74202	-0.411594	-1.953613	-1.41449	-0.762319	-1.759415	-1.608704	-2.72464
Phosgene_5	-0.046377	-0.365219	-1.486954	0.930435	0.31015	-6.124649	1.663769	-0.628998	-5.77681	0.382599	0.669571	0.565216	-0.492767	-0.533325	-1.089855	-0.936234	0.037682	0.70435	-1.324631	-1.420288	-0.53623	-0.730438	-0.681168	0.892754	-2.565216	-1.281158	-0.869553
Phosgene_6	0.324638	-0.799995	-1.617401	0.617391	-0.199997	-9.939133	3.608696	-0.730438	-9.942032	-1.449265	-1.536224	0.237671	-0.930435	-2.028992	-0.930435	-1.32753	-1.052177	1.034782	-2.843491	-1.379703	1.200001	-2.26088	-2.605789	0.817391	-2.179703	-2.542023	-3.779709
Phosgene_7	-0.089855	-0.002899	-1.231888	0.533333	0.942024	-6.205795	1.718841	-0.382614	-8.292755	0.515945	-0.77681	0.133331	-0.773926	-0.455078	0.956524	0.289856	1.771011	1.130435	-1.727539	-0.48407	-0.18261	-0.875366	-1.747833	-2.266667	-1.089859	-1.634781	-0.452164
F2_1	2.072464	2.968117	-10.2058	2.057971	5.669563	-10.04639	6.223188	4.382607	-6.834778	0.159424	0.342026	1.82608	1.020294	0.492767	-0.255074	0.89566	0.463768	0.199997	0.65506	0.281158	0.721739	0.77681	0.339127	-0.307247	0.411591	3.002899	-0.269577
F2_2	1.362319	1.782608	-8.475357	1.901449	4.171013	-10.41449	4.118841	3.324631	-6.915939	-0.29274	-1.005798	0.110153	0.933334	0.959412	-0.136234	0.434784	0.098549	-0.260868	0.631882	-0.037674	0.843477	2.579712	0.298553	-0.046377	2.066666	3.202896	-0.263763
F2_3	1.086957	2.066669	-9.066666	2.150724	5.802902	-9.431885	2.872464	2.318848	-6.884064	-0.556519	0.081161	1.504349	0.681168	0.220291	-0.762318	-0.202896	0.27536	-1.118835	-0.750732	-0.733337	-0.631884	0.32753	-0.113037	0.321739	1.530441	2.017395	1.110138
F2_4	2.768117	3.272469	-12.14203	1.927536	5.081161	-9.246384	4.828985	3.255074	-6.046371	0.017395	0.478256	1.423187	1.736237	0.785507	-0.533333	0.049286	-0.623192	-0.930428	-0.420288	-0.707245	0.02029	0.420288	0.837677	-0.069565	2.997101	4.655075	2.237686
F2_5	2.055073	2.878258	-10.57681	1.956522	5.486954	-9.437683	6.191304	4.353622	-7.515945	-0.660873	0.411591	1.32753	0.182602	0.121735	0.518841	-0.272461	0.704346	0.426094	-1.643478	-0.031876	0.333332	0.901443	-0.208694	0.223188	0.933334	2.640579	0.730423
F2_6	1.582609	2.597099	-8.321747	1.721739	4.568115	-9.199997	2.863769	2.571014	-6.628983	-0.602905	-0.359421	0.747818	0.591309	-0.994202	-0.028984	0.405792	-0.066666	-0.281158	0.171021	-0.423187	-0.063768	-0.060867	-0.194199	0.371014	0.669571	1.771011	-0.455063
F2_7	1.747826	2.220291	-10.57101	2.382609	5.90435	-9.159424	5.278261	3.249275	-5.657959	0.684052	-0.240585	3.628998	0.973907	-0.400009	1.414494	0.942032	0.466667	0.202896	0.272461	0.095657	-1.040581	1.315948	0.156525	-0.414493	1.889847	2.391296	1.066666
NO2_1	0.944928	4.402897	-29.22029	2.231884	1.889854	-50.22029	0	3.342026	-32.33624	0.489853	2.657974	-0.197098	1.710144	0.356522	1.09565	-0.507248	-0.376812	1.704348	0.562317	-6.089859	2.46087	0.843475	0.718834	0.095652	4.68116	4.336235	-1.779709
NO2_2	3.747826	6.872463	-33.63768	2.95942	4.988407	-46.45798	0.066667	5.197098	-31.6174	-0.318832	0.936234	1.904343	0.504349	0.840576	-0.324638	-1.292755	-1.959419	1.768116	0.869568	-5.744919	3.249274	0.852173	-1.214493	2.110145	5.472473	6.457962	-3.63768
NO2_3	1.944928	5.095654	-26.66087	2.185507	3.327538	-37.44637	0.052174	2.124641	-21.37682	0.075363	-1.060867	-2.611588	0.333328	0.063766	0.97681	-0.849289	-0.237681	0.942029	0.26088	-3.391296	1.037681	0.599991	0.226089	0.510145	3.330437	2.440575	-3.130432
NO2_4	2.675362	7.875362	-33.59419	2.669565	4.811592	-49.21159	-0.014493	3.718842	-31.56522	-0.266663	-0.217392	-0.333328	1.869553	-0.266663	1.571014	-1.153625	-1.513042	1.510145	-0.057968	-5	3.437681	-0.040588	-1.49855	0.614493	3.533333	3.614494	-3.594193
NO2_5	0.733333	3.794205	-27.61739	1.973913	2.431885	-44.17682	0	4.4058	-31.04927	1.324646	0.814499	0.446381	2.028976	1.840591	0.301449	0.150726	-0.881159	2.324637	0.46666	-5.530441	3.504348	1.228989	-0.185516	0.069565	6.568108	5.802895	-1.46376
NO2_6	6.463768	7.710148	-39.6029	2.052174	5.026089	-50.12174	0.217391	5.101456	-33.40579	0.571014	0.805801	0.631882	0.973907	0.695663	-0.588406	-0.878265	-0.72464	1.982613	-0.36232	-4.956512	2.562321	0.046371	-1.834778	0.266667	5.211594	5.408691	-3.881165
NO2_7	1.269565	5.52174	-27.9913	2.031884	3.41449	-38.87247	0.249275	2.710144	-25.35652	0.028992	-0.185501	-2.762329	1.121735	0.142029	-0.765217	-0.744919	-1.605797	0.918841	-1.457977	-1.437683	-0.37971	-0.020294	-0.220284	0.652174	4.846382	3.898552	-3.379715
CH3NHNH2_1	0	0.017391	1.617386	0.06087	-0.11594	-0.553619	0.002899	-0.666664	-1.292755	-0.58551	0.486954	-1.710144	-5.023193	-1.289856	0.86087	0.434784	0.356522	0.431884	-0.255066	0.562317	0.376811	-5.255081	-0.060867	0.35942	-0.753616	-1.002899	1.333328
CH3NHNH2_5	0.226087	0.472466	-0.628983	-0.046377	-1.075363	-0.10434	-0.014493	-0.426094	-0.794205	0.278275	0.762314	-3.072464	-4.608704	-1.591293	-0.402901	-0.202896	0.550724	0.434783	-0.918839	0.10144	-0.605799	-5.17392	-2.234772	0.521739	-1.756516	-1.631897	-0.092758
CH3NHNH2_2	-0.072464	-0.257973	0.614487	0.434783	-0.400002	-0.875366	0.263768	-0.011597	-0.721741	-0.211609	-0.246384	-1.124634	-4.005798	-1.623184	1.539131	-0.136246	0.834785	1.159424	-1.1884	0.060867	-1.347824	-3.860855	-0.052185	3.205799	-1.686966	-0.834778	-0.559418
CH3NHNH2_3	-0.028986	-0.547825	0.65506	-0.171014	-0.800003	-0.142029	0.04058	-0.62899	-0.492767	0.228989	-0.614487	-2.284058	-3.614487	-0.976807	0.689857	-0.831879	0.104349	-0.417391	-0.956528	-0.469559	0.634783	-3.489868	-0.927536	-0.031884	-1.866669	-2.002899	1.110153
CH3NHNH2_6	-0.498551	-0.431885	-0.65506	-0.176812	-1.06377	-1.10144	-0.588406	-1.568115	-2.388412	0.10434	0	-1.843491	-1.904343	-0.930435	-0.553623	-0.6203	-0.052174	0.10145	-1.127533	-0.168106	-1.42029	-2.58551	-1.34494	-0.623188	-1.457962	-1.556519	-2.489853
CH3NHNH2_4	-0.498551	-1.04348	1.46376	-0.04058	-0.437683	1.521744	-1.730438	-0.869553	0.939133	-0.191299	-0.260864	-2.113052	-3.594208	-0.614487	2.637684	0.040573	0.269566	0.956522	-0.576813	0.028992	1.431881	-2.040573	-1.762329	1.704348	-0.649277	-1.092758	0.53624
CH3NHNH2_7	0.098551	-0.081158	0.94783	-0.188406	-0.440578	1.823196	-2.063774	-0.565216	1.733337	-0.443481	0.440582	-0.886963	-3.640579	-1.973923	0.811592	-0.385498	-0.089859	-1.234779	-0.365219	1.031891	-0.121739	-1.886948	-0.588409	0.49855	-0.988403	-1.614487	0.417404

	R10	G10	B10	R11	G11	B11	R12	G12	B12	R13	G13	B13	R14	G14	B14	R15	G15	B15	R16	G16	B16	R17	G17	B17	R18	G18	B18
SO2_1	1.24058	6.211594	-27.24637	0.156522	0.200001	-6.744919	0.011594	-0.713043	-2.689855	0.239869	0.838078	0.428986	0.428986	0.428986	-1.326429	-0.568116	0.686957	0.666668	0.165217	0.084061	-0.695663	0.376812	-0.185516	0.142029	-0.426086	0.985504	1.594208	-1.014496
SO2_2	0.672464	4.947826	-22.3913	0.426087	-0.373913	-6.857971	-0.008696	-0.634789	-3.579712	-0.118851	0.614502	-0.965225	0.750732	-0.446365	-0.171013	0.840591	-0.017391	-0.301449	-0.843475	0.32753	-0.62029	0.368118	-0.379715	0.15942	0.843491	1.655075	-1.68985
SO2_3	0.443478	4.168114	-24.22609	0.176811	-1.188408	-8.460861	-0.113043	-1.976814	-4.13913	-0.156525	-1.327545	-0.397095	0.478256	-1.10434	0.405796	-1.782608	0.034782	-0.005797	-0.095657	-1.113052	-0.631885	-0.576813	-1.568115	-1.055072	-0.750732	-0.069565	-3.373917
SO2_4	3.75942	7.965218	-28.28407	0.35942	-0.533333	-7.171005	0.002899	-1.153625	-2.455078	0.159424	0.217392	0.194199	0.840576	-0.069565	0.675362	0.666656	0.373917	0.005798	-0.550735	-0.260864	-0.220291	0.805786	0.797104	0.762319	1.823181	0.576813	-1.971008
SO2_5	2.753623	5.579708	-24.52174	0.57971	-0.77681	-8.527527	0	-1.63768	-3.626083	-0.41449	-1.046387	0.75943	-0.75943	-1.573914	1.069565	-0.771011	-0.428986	-0.069565	-0.759415	-1.162323	-0.588406	-0.857971	-0.782608	-0.947826	0.037674	-0.153625	-3.081161
SO2_6	0.017391	2.866667	-18.83188	-0.008696	-0.255072	-5.008698	0	-1.165222	-3.837677	-1.03479	-0.426086	0.515945	0.208694	-0.808701	0.373913	0.095657	0.107246	0.47826	-0.197098	-0.478271	0.42029	-0.255066	0.353622	0.501449	-0.446381	0.791298	-1.321732
SO2_7	4.521739	8.324642	-28.61739	0.315942	0.075363	-7.756516	0.005797	-0.600006	-2.750717	-0.643478	0.571014	-0.852173	-0.46666	0.342026	0.266666	-0.872467	0.646378	0.22029	-0.527527	0.028992	0.385508	-0.399994	0.089844	0.15942	1.052185	2.600006	-2.008698
HCN_1	0.028986	1.973913	-16.83479	2.524638	1.776812	-56.20869	0	-0.643478	-30.11015	-0.736237	-0.455063	0.736237	0.127533	-0.339127	-1.643478	-0.057968	-0.246377	0.037681	-0.321747	0.582611	-0.336232	1.373917	-0.113045	-0.008696	0.944923	0.623192	-1.652176
HCN_2	-0.005797	2.142027	-17.63768	2.915942	0.527534	-46.8203	0	-1.802895	-34.6174	1.399994	1.489853	7.669556	0.542023	0.057968	0.33913	-0.405792	-0.391304	-0.153623	1.142029	-0.176804	0	0.373917	0.031883	0.043478	1.075363	0.573914	-2.333336
HCN_3	0.017391	1.695652	-17.26086	3.875362	1.605797	-55.27826	0.191304	-1.144928	-28.79999	1.040573	1.289856	1.930435	1.269562	0.681168	-0.947826	-0.25798	-0.231884	-0.266667	0.701447	0.385513	0.35942	1.055069	0.176811	0.008696	1.597107	1.136238	-0.727539
HCN_4	0	1.069565	-15.74203	2.481159	0.733332	-46.30435	0.318841	-2.414494	-26.00578	-1.785507	-0.313034	0.86087	0.223175	0.040573	-0.118841	0.055084	0.081159	-0.098551	-0.597107	0.295639	-0.028986	0.228989	0.249275	0.414494	0.924637	0.515945	-1.460869
HCN_5	0.913043	2.240578	-15.55943	3.582609	1.750725	-56.76521	0.197101	-1.797104	-28.6145	0.831894	0.74202	1.24057	1.005798	-0.133331	0.168116	0.484055	-0.072464	0.226087	1.417389	0.466675	-0.866667	1.110138	-0.197105	-0.292754	1.092751	0.686958	-1.147812
HCN_6	0.008696	1.605799	-16.97102	3.234783	1.588406	-55.54492	0.005797	-2.156521	-25.83768	0.376801	0.950729	2.797104	0.681152	-0.185516	-0.64058	0.101456	-0.092753	0.026087	-0.77681	-0.084061	0.049275	0.220291	0.147827	0	0.333328	0.623184	-1.243484
HCN_7	0.005797	1.466669	-13.75652	2.869565	0.968115	-58.87247	0	-1.692757	-31.91304	1.057968	1.640579	2.930435	0.376801	0.318848	-0.666666	0.681152	0.304348	-0.072464	0.631882	0.660858	-0.005797	0.573914	-0.689857	-0.014493	0.585503	0.339127	-0.162323
HF_1	0.005797	4.034782	-27.30725	1.466667	0.788406	-32.36812	0	-2.388405	-19.1971	0.13623	0.779709	1.759415	1.602905	0.081161	-1.391304	0.255066	-0.365218	0.014493	-0.918839	-2.849274	0.321739	-0.646378	-2.791306	-0.069565	2.008698	2.628983	-2.626099
HF_2	2.594203	5.982609	-28.41738	1.808696	2.814491	-33.22609	0	0.840584	-18.79131	0.13913	-0.046371	-1.133331	0.684067	-0.420288	0.655075	0.179703	-0.284058	-0.573914	1.269562	-1.869568	0.568116	1.286957	-0.469566	0.005797	3.356522	2.460876	-2.41449
HF_3	0.257971	5.715942	-25.51884	1.553623	2.805794	-32.93333	0	1.440582	-17.3884	0.985504	0.652176	-0.521729	2.58551	1.031891	0.701448	1.307251	0.533333	1.327538	2.402893	-1.249268	1.255073	2.936234	0.614487	0.005797	3.408699	3.005798	0.217392
HF_4	0.272464	3.785507	-23.88985	2.095652	1.710144	-34.24348	-0.142029	0.727539	-18.33913	-0.286957	-0.82608	0.13913	1.542023	0.17392	0.666667	0.771011	0.005797	0.313044	0.388397	-0.510147	0.049275	1.478271	0.292755	0.02029	0.924637	2.063766	-1.985504
HF_5	0.231884	5.17971	-26.69855	2.188406	2.788406	-31.65797	0.005797	1.095657	-16.30145	-0.852173	0.744934	-2.936234	1.304352	-0.475357	0.689854	-0.692749	-2.22319	-1.452175	-0.657974	-2.582611	0.84058	0.904343	-0.518845	-0.043478	5.063766	4.886955	-3.898544
HF_6	0.237681	4.65797	-25.30725	2.165217	2.226089	-32.41161	-0.002899	1.605797	-16.54782	-0.597092	0.08696	-0.043472	1.988403	0.823196	0.391304	1.023193	0.327538	0.765219	0.939133	-2.388412	0.376812	2.318848	0.011597	-0.33913	2.94783	3.704346	-1.973907
HF_7	0.388406	4.469566	-20.85217	3.623188	4.191303	-26.32175	0.052174	1.150726	-12.69565	1.011597	0.310135	0.588409	2.495651	0.553619	1.408695	-0.197098	0.031883	0.2029	0.756516	-2.252182	1.171014	1.675369	-0.504333	0.524638	3.881165	3.597099	-4.266663
HNO3_1	0.005797	1.043478	-14.6029	1.269565	1.463768	-25.67825	-0.002899	-2.165215	-15.92174	-0.730438	0	-5.933334	-1.052185	-0.495651	-1.284058	-1.153625	-2.284058	-0.568115	-1.857971	-2.50145	-0.086957	-1.611603	-2.568115	-0.565217	0.608696	1.255074	-2.982605
HNO3_2	0.510145	2.098549	-11.57681	2.246377	0.457972	-26.32175	0.002899	-0.86377	-14.58261	1.768112	2.231888	-14.0116	2.147827	0.72464	0.165217	0.559433	0.852174	0.594203	3.26088	2.118835	0.524638	4.081161	2.069565	0.727536	2.771011	3.304344	0.028984
HNO3_3	0.089855	0.985506	-12.14783	1.727536	-0.136232	-27.81448	-4.191305	-6.97971	-18.0058	-0.142029	0.171021	-10.23767	0.420288	-0.759415	-0.565217	-1.199997	-0.507246	0.107246	0.443481	0.252182	0.130435	0.118835	0.113045	0.475362	1.602898	1.62899	0.371017
HNO3_4	0.005797	1.043478	-14.6029	1.269565	1.463768	-25.67825	-0.002899	-2.165215	-15.92174	-0.730438	0	-5.933334	-1.052185	-0.495651	-1.284058	-1.153625	-2.284058	-0.568115	-1.857971	-2.50145	-0.086957	-1.611603	-2.568115	-0.565217	0.608696	1.255074	-2.982605
HNO3_5	0.008696	0.707246	-6.765213	1.214493	-0.521738	-18.03188	0.127536	-0.802898	-12.65506	0.078262	-0.698547	-1.872467	0.892746	-0.744934	0.014493	0.228981	-0.228985	0.037681	-1.031876	-0.408699	0.043478	0.817398	-0.434784	-0.281159	1.182606	1.159424	-1.623192
HNO3_6	-0.002899	1.113045	-8.50145	1.098551	-0.104347	-16.52754	0	-1.310143	-10.25508	0.092758	0.588409	-2.124634	0.756531	-0.402893	-0.411594	0.933334	-0.046377	-0.031884	-0.333344	0.307236	0	2.315933	1.553627	0.371015	2.249275	2.020287	-0.768112
HNO3_7	0.002899	0.846376	-8.252174	1	0.518841	-15.36232	0.156522	-0.898552	-11.21159	-0.620285	-1.078262	-1.226089	-0.428986	-0.530441	-1.269565	0.243484	0.315942	0.052174	-0.336227	1.400009	0.150725	-0.614502	-0.521736	-0.078261	1.36232	1.365219	-0.36232
Hydrazine_1	-0.078261	-0.565216	1.220291	-0.211594	-0.455074	1.933334	-1.336232	-0.095657	1.727539	-0.005798	-0.681168	-12.47246	-21.8232	-8.704346	4.060871	-0.333344	0.5942	0.101448	-0.869568	-0.762329	0.686956	-13.93333	-5.031876	0.6	-2.020294	-2.521744	1.623184
Hydrazine_2	-0.46087	-0.324638	1.782608	-0.510145	-0.460869	2.707245	-0.257971	1.237686	0.333328	-0.313049	-0.704346	-9.542038	-11.50435	-4.147827	3.411598	0.371017	0.62899	-0.492752	-0.553619	0.455063	0.385508	-11.54492	-4.53334	3.115942	-2.765228	-2.217392	1.176819
Hydrazine_3	0.028986	-0.327538	0.573914	-0.092754	0.043476	3.626083	0	0.411598	0.243469	0.043472	-0.388412	-8.304352	-14.39421	-5.933334	2.791306	0.333328	0.028992	0.553623	-1.08696	-0.168121	0.666666	-15.16232	-5.052177	0.107246	-2.884056	-3.168114	1.805801
Hydrazine_4	-0.826087	-1.356522	2.420288	-0.255072	0.226086	2.376816	0.017391	1.301445	1.527527	0.144928	0.266663	-13.31883	-15.85797	-5.736237	3.25507	0.10434	0.075363	-0.020287	-0.643478	0	0.605799	-9.663773	-3.310135	1.333333	-2.376816	-2.45797	1.942032
Hydrazine_5	-0.136232	-0.695652	1.043488	0.092754	0.356522	1.484055	0.008696	0.63768	3.266663	0.756516	-1.284058	-12.12753	-14.95363	-6.617386	3.347828	0.368118	1.060867	1.168114	-0.713043	0.86087	1.124638	-15.1855	-4.89856	2.043478	-1.678261	-3.194199	4.25798
Hydrazine_6	-0.086957	-0.211594	0.701447	0	-0.055073	3.205795	0	0.411591	1.434784	0.657959	-0.257965	-13.70435	-22.0087	-8.785507	5.263767	-1.391312	-0.13913	-0.199997	-0.913055	-0.231888	0.095652	-19.55362	-7.408691	3.350723	-2.127541	-3.139137	2.002899
Hydrazine_7	-0.33913	-0.617386	0.953613	-0.171014	-0.342026	0.727539	0	-0.365219	0.46666	0.747833	-1.420288	-14.75942	-20.93913	-8.730438	5.713047	-0.678268	0.402901	1.350723	-0.3797	-0.420288	0.026087	-21.46088	-9.452179	4.028986	-2.924637	-4.185509	1.197098

	R19	G19	B19	R20	G20	B20	R21	G21	B21	R22	G22	B22	R23	G23	B23	R24	G24	B24	R25	G25	B25	R26	G26	B26	R27	G27	B27
Control_1	0.046387	0.124649	1.762314	-0.402908	0	0.675362	0.695663	0.785507	0.675362	0.501349	0.231884	0.512077	0.381643	0.086957	0.084058	-0.014493	0.234787	0.34203	0.527536	-0.072464	0.333344	0.605804	0.63768	-0.228989	0.930435
Control_2	0.507248	-0.536224	-0.040588	0.715942	-0.544937	0.394203	0.44928	0.710144	0.353622	0.408691	0.715942	-0.08696	-0.075363	-0.669556	-0.092758	0.272469	0.327536	-0.211594	0.13913	-0.092754	0.084059	1.226089	-1.426086	0.597092	-0.014481	0.205795	-1.843475
Control_3	-0.211594	-0.797104	0.066666	-0.423187	-0.043472	-0.156521	-0.150726	-0.162308	0.220291	-1.037682	0.27536	0.388412	-0.614487	-0.507233	0.571014	-0.753624	-0.411594	-0.197102	-0.246368	0.237679	0.518841	-0.573914	0.046371	-0.759415	-0.779709	-0.423187	-0.286957
Control_4	1.666672	2.049271	2.144913	0.150726	0.417389	-0.400002	-0.234787	0.791306	-0.77681	0.376816	-0.243484	0.379715	0.53334	0.05217	-0.686966	-0.031883	-0.246377	0.118841	0.150726	-0.066666	-0.10145	0.36232	0.602905	-1.171021	-0.107254	0.350723	0.779709
Control_5	1.10434	0.246384	-0.017395	0.605804	-0.36232	0.255074	0.031876	-0.440567	2.092758	1.081161	-0.568115	0.736237	0.371017	0.547821	0.742035	0.588402	-0.226087	-0.13913	1.255081	-0.017391	-0.110144	0.295654	-0.379715	2.028992	0.640579	-0.828995	3.478256
Control_6	0.359421	0.428986	0.939133	-0.263763	-0.739136	0.17971	-0.457977	-0.037689	0.895653	0.643478	-0.399994	0.289856	0.005798	-0.759415	0.823196	-0.089859	0.078261	0.318841	0.68985	0.666668	0.788406	0.953613	-0.597092	0.544922	-0.399994	-0.478256	2.313049
Control_7	-0.77681	0.353622	-0.915939	0.327538	0.197098	-0.15942	0.599991	-0.121735	1.588402	0.240585	-0.208694	1.278275	-0.733337	0.817383	-0.649277	-0.388412	-0.394203	0.104348	-0.321747	0.802898	0.826088	-0.142029	0.904343	-1.142029	0.715942	-0.686966	1.428986
HCHO_1	1.115952	1.356522	-4.779709	0.043472	0.214493	0.840576	0.936234	0.518845	1.31884	0.115944	0.142029	1.379715	1.084061	0.86377	0.130432	-1.515938	0.298551	0.026087	0.869568	1.072464	0.292755	0.423187	0.49855	0.773911	0.695663	-0.107254	1.211594
HCHO_2	-0.063766	0.423187	-4.405792	-0.182602	0.069565	1.266666	-0.063766	-0.173904	0.805801	-0.020287	-0.281158	0.562317	-0.408691	-1.037674	-0.049271	-2.026085	0.168116	0.11884	-0.147827	0.266663	0.124634	-0.344925	0.028976	-0.455078	0.026093	-0.576813	-0.124634
HCHO_3	0.040573	0.318832	-4.298553	-0.524643	-0.44928	-0.144928	0.107254	-0.342026	-1.127541	-0.257973	-0.115944	0.142029	-1.034775	0.307251	-0.765228	-1.640579	0.318841	0.281159	-0.991302	1.953625	2.040581	-0.489868	-1.269562	0.211594	-0.475372	0.718842	-1.446381
HCHO_4	-0.86377	-0.255066	-4.562317	-0.217377	0.289856	0.515945	-0.246368	0.434784	-1.930435	-0.402893	0.240578	0.063766	-0.98262	-0.657959	1.73912	-1.968117	0.286957	-0.249275	-0.828995	0.901451	1.069565	-0.605804	0.081161	0.944931	0.110153	0.544922	-0.892761
HCHO_5	0.324631	0.475357	-3.666656	-0.255066	0.701447	0.365215	0.924637	0.77681	0.223183	0.313042	0.486961	0.94783	0.591309	0.020294	0.802902	-1.101448	0.249275	0.208696	0.478271	0.466667	-0.22319	-0.162308	0.179718	0.866669	-0.344925	0.081146	-0.8116
HCHO_6	-0.313049	0.507233	-3.988403	0.889847	0.26088	-1.321739	1.060883	1.023178	-0.014488	-0.040581	0.028984	0.872467	1.394196	-0.162323	-0.342026	-1.199997	0.078261	0.226087	0.55072	0.727539	2.055069	0.904343	0.234787	-0.124634	0.350723	1.759415	2.057968
HCHO_7	1.652176	1.39711	-3.376801	1.171021	0.315933	0.069565	1.507248	1.68985	0.414497	0.057976	0.339134	1.113052	-0.092758	0.023193	0.72464	-1.257973	0.457971	0.518841	1.788406	1.605797	1.857971	0.765228	1.237671	1.214493	0.907257	1.50145	1.542023
Arsine_1	-1.133331	-1.165222	-1.423187	0.121742	0.118843	0.463768	0.400009	0.466667	0.260872	-0.539131	0.22319	-0.942032	-0.208694	0.976822	0.130432	0.768116	0.37971	0.286957	0.075363	0.371016	0.637681	0.05217	0.237686	2.257965	0.333328	0.588394	0.179703
Arsine_2	2.704346	1.849274	-1.620285	-0.605797	0.434784	-0.02319	-1.249268	0.45507	-0.139137	-0.237679	-0.17971	-0.602905	-1.437683	0.22319	-0.765213	-0.628986	0.165217	-0.263768	-0.475372	0.246376	-0.165217	-0.199997	0.075348	-1.994202	-1.327545	0.133331	-0.153625
Arsine_3	-0.605789	-1.118835	-0.991302	-0.626091	-0.440582	0.031885	-1.098557	-0.22319	0.240578	0.289856	0.243477	0.084061	-0.684052	0.678253	-0.063766	-0.055073	-0.121739	-0.197102	-0.556519	-0.275362	0.292753	-1.284058	-0.49855	0.521744	-0.971008	-1.347824	1.081146
Arsine_4	1.031876	0.457962	0.292755	0.205795	0.428986	0.356522	0.002899	0.446373	0.350723	0.226088	0.281158	0.857971	0.985519	0.411591	0.055084	0.055071	0.176812	-0.060869	1.915955	-0.153624	0.710144	0.782608	0.660873	0.942032	-0.405807	0.843491	0.318832
Arsine_5	0.956528	1.217392	1.495667	0.713043	0.794205	-0.356522	1.605789	0.939125	-0.350723	0.191303	-0.118835	0.588409	-0.385513	0.107254	1.365219	0.208694	0.084058	0.098551	0.617401	0.28116	-0.043478	0.179718	0.420288	1.657974	1.095657	0.205811	-1.544922
Arsine_6	1.542038	1.327545	1.32753	0.446381	0.118843	0.66087	0.092743	0.892754	0.13044	-0.084057	-0.205795	1.057968	-0.260864	-0.426086	-0.530441	-0.29855	0.098551	-0.115942	0.86377	0.852174	0.724638	0.350723	-0.237686	0.982605	0.486954	0.58551	0.278259
Arsine_7	-0.153625	-0.950729	-2.576813	0.695648	0.779709	-0.34203	1.205795	0.79129	0.368118	0.368118	-0.313042	0.973907	0.73912	-0.831894	-0.805786	0.028984	0.243478	0.121739	0.318848	0.063768	0.130435	0.669556	0.095657	0.043472	1.017395	0.698547	-0.257965
Phosphine_1	-3.571014	-2.982605	-0.289841	-0.782608	-0.037682	0.055073	-0.478256	-0.217392	-0.823189	0.330433	0.171013	0.330429	-0.336227	-1.744919	0.301437	-0.055073	0.002899	-0.4	0.002899	-0.255072	0.124639	-1.539139	-0.1884	-0.849274	0.211594	0.663757	-1.324646
Phosphine_2	-2.049271	0.011597	-0.295654	-0.950722	-1.118843	0.4	-1.597107	-1.089859	-0.924637	-0.301449	-0.559418	-0.907242	-1.057968	-1.023178	-1.582611	-0.026087	0.049275	0.472464	-1.376801	-0.684059	0.089855	-0.988419	-0.959412	-1.536224	-0.828979	-0.988403	-0.3797
Phosphine_3	0.197113	-0.521729	-2.008698	-0.226082	0.391304	-0.617392	0.031891	0.257973	-0.765221	-0.171017	-0.579712	-0.988403	-0.640579	-1.962326	-1.028992	0.142029	0.42029	0.765217	0.420288	-0.147825	-0.617392	-0.400009	-0.646378	-1.460861	0.820282	0.63768	-1.252167
Phosphine_4	0.808685	0.127548	-1.043488	-0.144928	-0.272461	-0.533333	0.118851	-1.002892	-0.837685	-0.072464	-0.739136	-0.556519	-1.13623	-0.44928	-3.150711	-0.211594	-0.017391	0.02029	-0.336227	0.130432	0.228985	0.318848	-0.704346	-0.191299	-0.579712	-1.571014	-0.31015
Phosphine_5	-1.382614	-1.58551	-0.428986	-0.72464	-0.481155	0.057972	-1.530441	-1.301453	-0.223183	-0.17971	-0.811592	-1.310135	-1.721741	-2.028992	-1.968124	0.002899	0.043478	0.289855	-1.008698	-0.13913	-0.04058	-1.747833	-0.971008	-1.840591	-0.681152	-1.426102	-1.118835
Phosphine_6	-6.214493	-5.956512	-7.040588	-1.492752	-1.55072	-0.881161	-2.600006	-1.573914	-1.463768	-0.202896	-1.495651	-0.50145	-1.63768	-2.463776	-1.22319	-0.313042	-0.072464	-0.171014	-1.463776	-0.718842	-0.173913	-1.666656	-2.063766	-0.834778	-1.794205	-1.753632	-1.605789
Phosphine_7	0.110153	-1.608704	-1.930435	0.539131	-0.060867	-0.266666	-0.910141	-1.220291	-0.220291	-0.292753	-0.040577	-0.605804	-0.872467	-2.147827	0.295654	-0.379711	-0.226087	0.495652	-0.921738	-0.536232	-0.028986	-0.402908	-1.486954	-0.397095	-1.179718	-1.162323	0.750732
Diborane_1	0.417389	0.513046	0.304352	0.333336	-0.101448	0.814493	1.179703	0.849281	-0.110146	0.715942	1.243477	0.260864	-0.098557	1.03479	-0.336227	0.518841	-0.243478	0.344928	0.165222	0.194206	0.10145	0.13913	0.171005	1.576813	0.330444	0.344925	1.199997
Diborane_2	0.098541	0.857971	1.417389	-0.31884	0.727539	0.721739	1.327545	1.017395	1.208694	-0.226086	0.495651	1.524643	1.701462	0.634781	1.342026	-0.043476	0.017391	0.585507	0.733337	0.614491	0.991304	-0.875366	-0.002899	0.985504	-0.278259	-0.084061	0.553619
Diborane_3	0.405792	0.684067	1.98262	0.008698	-0.162315	-0.504349	-0.6203	0.640579	0.13623	-0.092754	0.478264	-0.695648	0.872452	0.318832	-2.069565	-0.017391	-0.176812	-0.052174	-0.269577	-0.139133	0.304348	0.023193	-1.153625	-0.74202	-0.318848	0.115952	0.356522
Diborane_4	0.200012	0.794205	-0.124634	0.17971	0.240578	0.544928	0.295654	1.034782	-0.005798	0.110146	0.423187	0.255066	0.41449	-0.455078	1.347824	0.246376	-0.072464	-0.278261	1.568115	0.762318	1.113045	-0.171021	0.744934	-0.562317	0.985504	0.455063	-0.727539
Diborane_5	-0.939133	-0.695648	0.437683	-0.18261	0.4058	0.191303	-0.350723	-0.142029	-1.353622	0.260872	0.124641	-0.568115	0.544922	0.518845	0.730438	-0.388405	0.066667	-0.014493	-1.043472	-0.133331	0.197102	0.049271	-0.060867	-1.234787	0.043472	-0.423187	-1.159424
Diborane_6	0.678268	0.805801	0.553619	-0.753624	-0.368118	-0.42029	-0.837677	0.127533	-0.788406	0.171013	-0.855072	0.081161	-1.857971	-0.628983	-0.982605	-0.295652	-0.173913	0.023188	-0.681152	0.27536	0.675363	-0.171005	-0.263779	-0.388412	-0.533325	-0.301453	-0.066666
Diborane_7	3.304352	2.130432	3.840576	1.313049	1.45507	1.556522	2.359421	2.507248	2.713043	1.327538	2.350723	1.631882	1.849274	1.185516	1.434784	0.507248	0.388406	0.710145	4.05217	1.437683	1.026087	1.547821	1.472473	2.805786	1.420288	0.707245	2.431885
H2S_1	0.434784	0.669556	-0.524628	-0.518829	-0.605789	-2.571014	-0.150726	-0.10434	-0.400002	-0.779709	0.049271	1.263779	0.762329	0.41449	-1.165222	1.281158	0.086957	-0.147826	0.475357	0.788403	-0.110146	0.078262	0.771011	0.744919	-0.353622	0.284058	-0.27536
H2S_2	0.446365	0.081146	1.36232	1.124649	-0.423187	0.017391	0.278259	0.263779	-0.31884	1.057968	-0.023193	-1.046387	0.991302	-0.333328	-0.252167	0.628983	-0.037681	0	1.707245	0.182606	0.828985	1.371017	-0.008698	1.49855	0.58551	0.455078	2.353622
H2S_3	-0.168121	0.240585	1.431885	0.446381	0.733337	0.226089	-0.568115	0.475372	0.353622	0.014488	0.527534	-0.060867	-0.313034	0.031891	-0.043472	0.147827	0.014493	0.130435	-0.237686	1.515942	1.37681	-0.075363	0.701447	0.542023	-0.055069	2.089859	1.304337
H2S_4	-0.13913	0.727539	0.646378	1.09565	1.057968	0.02319	0.281158	0.243469	0.428986	-0.249275	-0.104347	-2.440582	-1.315948	-1.13623	-0.428986	-0.70145	-0.22029	-0.188406	0.275375	-0.237679	-0.6	-0.208694	-0.376816	-1.307251	-0.002899	-1.031891	0.289856
H2S_5	0.420288	1.057968	0.394211	-0.037689	1.037689	-0.982609	-0.527542	0.530441	0.504341	-0.292747	0.611588	-0.788406	-0.759415	0.342026	0.124634	-0.689857	-0.217391	0.344928	1.153625	0.269566	0.510145	-0.214493	1.489853	-1.327545	-0.339127	1.168121	-0.104355
H2S_6	0.834778	0.481155	1.727539	0.510147	0.623184	2.478264	0.011597	1.194199	1.428986	-0.402893	0.956512	-1.234787	0.608688	0.011597	-1.968109	0.078262	0.608696	-0.084058	1.217392	0.81739	0.904348	-0.286957	0.191299	0.440567	0.649277	0.437683	2.794189
H2S_7	-0.991302	-0.46376	-0.478256	0.075363	1.118843	0.70145	-0.336243	0.657974	-0.411591	0.124641	0.50145	0.165207	0.17392	-0.652176	-0.257965	0.342033	0.133333	0.84058	-0.701447	-0.852173	-0.440582	-1.066666	1.304352	1.023193	-0.040588	1.211594	-0.336227
(CH3)2NH_1	-1.092758	-0.588409	-0.142029	1.405807	-2	1.620289	-1.292755	-0.776825	-1.185509	2.45797	2.098557	-1.002899	-0.878265	-1.469559	-1.779709	26.73913	13.72754	-1.785507	-0.962326	-0.710144	0.037682	-2.278259	-2.310135	-2.942032	-0.084061	-9.269562	-27.10725
(CH3)2NH_2	-1.495651	-1.127533	1.185516	0.052177	-2.944931	1.547825	-1.94783	-1.176804	-0.579712	1.910141	2.518837	-2.066666	-2.718842	-2.327545	0.231888	25.62898	7.713043	-1.371014	-1.907242	-0.736229	0.837681	-2.255081	-3.997101	-1.907242	-0.098541	-9.959412	-27.33913
(CH3)2NH_3	-1.684052	-0.168121	-0.791306	0.953621	-1.96521	1.359421	-1.13913	-0.150726	-0.321739	2.405792	3.915939	-1.463776	-1.457962	-1.394196	-1.391312	29.0116	10.05797	-1.310145	-1.350723	-0.376816	0.066666	-1.944931	-3.460876	-2.944931	-0.072464	-9.278259	-27.57681
(CH3)2NH_4	-0.489853	-0.107239	0.956512	1.13044	-2.336243	2.327538	0.162323	-0.611588	-0.452171	3.104347	3.539131	-0.368118	-0.562317	-1.075363	1.956512	27.07246	6.936233	-1.217391	-0.701462	-0.18261	0.089855	-2.194199	-3.394211	-1.452179	-3.507248	-13.86087	-32.17972
(CH3)2NH_5	1.220291	1.715942	2.092758	2.692749	-0.513046	2.942032	2.034775	1.243484	1.13913	4.336235	4.040581	-0.269562	-0.113037	0.872452	1.060867	28.30145	11.3971	-2.217391	1.266663	1.466667	1.397102	-0.452164	-1.124634	-1.347824	2.840576	-7.686951	-26.32465
(CH3)2NH_6	-1.878265	-0.962326	-0.55072	0.800003	-2.527527	1.8116	-1.202896	-1.420288	1.649277	2.394203	2.802902	-3.081161	-2.284058	-2.539124	-0.617386	26.61739	10.14493	-1.376812	-0.165207	-0.921738	-0.762318	-3.101456	-3.997101	-2.481155	-0.27536	-9.944931	-26.77681
(CH3)2NH_7	-0.423187	0.339142	0.875351	0.58551	-1.417389	1.904346	-0.681168	-0.942032	0.750725	2.023193	3.376808	-1.002899	-2.194199	-0.278259	1.237686	27.43768	7.342029	-1.411594	-0.089844	-0.266666	0.533333	-1.240585	-3.226089	0.930435	1.36232	-8.950729	-23.16812
(CH3)3N_1	-0.278259	-0.762314	-0.173904	-1.249275	-1.286957	0.402897	-0.921738	-1.084061	0.921738	1.107246	1.020294	0.330444	-0.828995	-0.394211	0.023193	17.90725	6.115942	-0.072464	-0.255066	-0.498558	-0.263763	-1.643478	-1.892746	-1.472473	-0.315948	-6.953629	-13.79421
(CH3)3N_2	0.115936	0.237686	-1.492752	0.214493	-0.185501	0.66087	0.411591	0.915939	0.423187	1.144928	1.36232	0.031891	-0.10434	0.002899	-0.139145	15.62898	5.915943	-0.44058	-0.028992	0.272461	-0.368118	-0.005798	-0.246368	0.455063	0.510147	-4.113037	-11.87827
(CH3)3N_3	2.107254	0.736237	0.640579	0.75943	0.05217	0.315941	-0.182602	0.556534	0.695648	1.330437	2.034775	0.226089	0.008698	-0.286957	0.521744	16.14493	3.742029	-0.466667	1.933334	0.70435	-0.620293	0.886948	-0.298538	0.652176	1.469574	-5.29274	-12.62029
(CH3)3N_4	-2.704346	-1.800003	-1.336227	-1.771011	-2.623184	-0.814491	-3.194214	-2.67247	-1.211601	-0.959419	-1.34494	-2.115936	-3.350723	-3.91304	-1.400009	15.67536	4.962319	-0.353623	-3.092758	-1.075363	-1.240578	-1.994217	-3.052185	-2.266663	-3.110153	-7.643478	-16.31303
(CH3)3N_5	0.028976	-0.666672	0.014481	-0.41449	-0.211594	1.533333	-0.617386	0.843475	0.333336	0.628983	0.342033	0.765213	-0.86377	-1.078262	1.730438	15.74203	5.301449	-0.73913	-0.200012	0.240578	0.875359	-1.066666	-0.704346	1.069565	-0.669556	-4.913055	-12.70435
(CH3)3N_6	-1.023193	-0.428986	-1.13623	-0.54493	-1.588394	1.414494	-0.707245	0.31015	0.315941	0.41449	0.579712	-2.286957	-1.205795	-1.298553	-2.31015	17.47247	5.031884	-0.657971	-0.773911	-0.200001	0.092754	-1.513046	-1.524643	-1.704346	-0.997101	-6.953613	-13.12755
(CH3)3N_7	-1.194199	-0.968109	-0.710144	-1.037689	-0.617386	-1.046379	-0.68985	0.423187	0.791306	0.953621	1.400002	-0.634781	-1.197113	-0.234787	-0.489868	17.53913	4.362319	-1.043478	-1.452164	-0.368118	-0.724636	-2.104355	-0.382599	-2.211594	-0.666656	-4.736237	-11.95651

	R19	G19	B19	R20	G20	B20	R21	G21	B21	R22	G22	B22	R23	G23	B23	R24	G24	B24	R25	G25	B25	R26	G26	B26	R27	G27	B27
Ammonia_1	-1.979706	-1.75943	-0.86377	2.350723	-5.431885	4.005798	-4.388412	-2.846375	-0.27[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-1.747826	-3.023193	-1.692753	1.202898	-2.50145	-2.44928	-2.147827	-3.301453	-20.30434	-40.21449
Ammonia_2	-1.521744	-1.594208	-2.005798	3.060867	-6.182617	4.208698	-2.753632	-2.400009	-1.440582	6.831879	3.715942	-6.513046	-3.078247	-3.231888	-2.901459	44.10725	27.52753	-1.66087	-2.15361	-2.046371	-0.434784	-2.675369	-4.553619	-3.359406	-1.452164	-18.87247	-40.95361
Ammonia_3	-2.020294	-2.339127	-1.507248	3.750725	-7.040573	5.115944	-2.762314	-2.513046	-1.046379	6.918846	4.272461	-6.133331	-2.884048	-2.75943	-2.402893	40.9884	17.06087	-1.353623	-3.405792	-1.226089	1.649273	-2.507248	-4.257965	-2.872467	-2.643478	-17.32755	-37.57391
Ammonia_4	-0.292755	-0.10434	-0.907242	3.933334	-4.211609	4.037682	-1.991302	-0.191299	1.057968	7.742027	6.36232	-4.6203	-1.150726	-1.031876	-1.513046	44.33333	30.76522	-3.686957	-1.124634	-1.828987	-1.165218	-1.956528	-0.886948	-0.385498	-1.13913	-17.40869	-36.66666
Ammonia_5	-1.205795	-0.376816	-1.782608	3.736237	-5.597107	5.811592	-2.933334	-1.831879	-0.118843	7.156517	6.260872	-4.426086	-1.524643	-0.857971	-1.428986	48.50436	28.44638	-0.44058	-2.423187	-1.672466	0.411594	-2.060867	-2.704346	-1.582596	-1.147827	-18.56522	-39.24637
Ammonia_6	-2.295654	-1.394211	-3.411591	3.246376	-6.762321	5.301453	-3.063782	-2.930435	-2.669571	7.144928	4.820297	-5.930435	-2.394211	-2.591293	-3.655075	45.61449	29.28116	-0.171014	-3.86087	-0.904346	0.281158	-4.243469	-3.672455	-4.217392	-2.681152	-16.67537	-34.76231
Ammonia_7	-1.382614	-0.344925	0.002899	4.368111	-5.098549	4.408699	-2.440582	-2.104355	0.144928	6.104347	5.568115	-2.968124	0.663773	1.113037	2.686951	45.77681	22.35652	-0.927536	-3.620285	-0.965218	-1.136238	-2.046387	-1.968124	-1.559418	-0.802887	-16.57681	-35.58261
HCl_1	-0.118835	-1.211594	-1.260864	-0.617393	0.173912	-0.489857	2.324631	-17.31884	-2.49855	1.069565	-0.002899	-3.663757	11.77971	10.06668	5.907242	-17.53913	5.124638	0.475362	-3.133331	-8.562321	3.098553	-0.50145	-0.182617	-2.031876	-0.295654	2.707245	6.872467
HCl_2	0.408691	-0.034775	1.666672	0.53334	0.678268	-0.678261	1.107254	-13.04927	-0.397095	0.434776	0.649277	-1.052185	11.92174	8.924637	5.399994	-23.09275	1.643477	1.411594	-0.53624	-8.771019	4.020287	1.611603	-0.356522	2.713043	-0.944931	4.086945	12.62318
HCl_3	1.168106	1.031891	-1.368118	0.005783	-0.768112	0.255074	3.524643	-14.11304	0.107246	0.040581	-0.104355	-2.411591	8.197098	5.588409	3.971008	-16.28985	4.156522	0.889855	-4.347839	-10.86956	7.243477	0.904358	-0.199997	1.492752	0.797104	3.718842	8.849274
HCl_4	-1.765213	-1.376816	-1.460861	-1.05217	-1.979706	-1.295654	-0.886963	-16.62608	-0.875366	0.41449	-1.617386	-4.327545	10.72464	9.234787	3.39711	-19.42609	3.631884	1.446377	-1.513031	-10.03188	3.834778	-0.36232	-2.31015	-2.113037	-2.36232	1.144928	8.495651
HCl_5	0.773911	0.46376	0.226089	0.113052	0.284058	-1.481159	1.550735	-16.70435	-2.257973	-0.313049	-0.379715	-3.744934	13.51883	11.77101	8.272476	-19.13913	3.501449	1.681159	-3.573914	-7.97971	3.959423	-0.260864	-0.333344	-1.304352	-0.202896	1.800003	9.739136
HCl_6	0.710144	0.434784	0.933334	-0.73912	0.649277	0.171017	2.142029	-17.78551	-1.144928	1.344925	0.542023	-2.579712	11.28696	7.089859	5.513046	-21.33913	2.466667	2.518841	-1.68985	-19.08986	8.26667	-0.095642	0.165207	-0.057968	-0.046371	2.985504	8.46666
HCl_7	-3.855072	-3.394196	-5.092743	-2.371017	-1.889862	-1.950726	-0.188416	-24.7942	-4.420288	0.301453	0.75943	-4.591293	13.15073	11.2	3.86377	-21.29565	1.510145	-1.515942	-5.652176	-14.45507	2.513042	-3.217392	-4.701447	-4.573914	-2.930435	1.571014	8.469574
(CH3)NH2_1	-2.03479	-0.988403	-1.765213	-0.286957	-1.973907	-0.208694	-2.573914	-1.118835	0.313042	3.892754	1.199997	-3.313049	-3.040588	-3.307251	-1.942032	22.63769	25.44638	-0.02029	-1.36232	-2.086952	-1.799999	-2.05217	-2.431885	-2.353622	-0.852173	-10.71594	-24.20869
(CH3)NH2_2	-0.492752	-0.55072	-0.191315	0.486954	-2.35363	1.34203	-0.837677	-0.614487	-0.388405	7.782608	4.507248	-8.730423	-1.179703	-2.744934	-0.46666	15.68116	3.107246	-0.6	-0.710144	0.286957	-0.115942	-2.672455	-3.127533	-1.481155	-0.794205	-10.93044	-27.97681
(CH3)NH2_3	-1.110153	0.13623	0.730438	2.03479	-2.466675	2.220287	-0.843475	-0.43187	1.50145	6.072464	3.176819	-4.469559	-1.075363	-2.098557	0.008698	20.76522	20.24058	-0.226087	-0.820297	-0.579704	0.489861	-1.837677	-1.805801	-1.443481	-0.84639	-9.542023	-21.43189
(CH3)NH2_4	-0.078262	0.281158	-0.469574	0.939125	-2.03479	0.11594	-1.046371	-0.588409	0.150726	7.655067	3.397095	-6.214493	-1.133331	-2.257965	-0.63768	23.08406	12.0058	-0.104348	-0.649277	0.521736	-0.388405	-2.13913	-2.255081	-2.321747	0.110153	-11.82318	-28.3826
(CH3)NH2_5	0.805786	0.072464	1.649277	0.020287	-0.5942	0.565216	-0.518845	-0.744934	-0.947823	8.469566	5.084061	-8.959412	-1.24057	-1.423187	-0.394211	13.25507	0.455072	-0.736232	-0.281158	-0.226086	-0.475363	-2.081161	-2.342041	-1.118835	0.452164	-10.54494	-27.35072
(CH3)NH2_6	-2.655075	-2.814499	-3.947815	-0.002899	-1.475365	1.231884	-0.921738	-2.852173	-2.347824	9.936234	3.397095	-9.579712	-1.834778	-3.307236	-0.631882	12.49275	1.330435	-0.536232	-1.762314	-0.672462	-0.144928	-2.41449	-4.214493	-3.269577	0.36232	-13.04927	-29.34203
(CH3)NH2_7	-1.243484	-1.234787	-0.686951	0.765221	-2.165215	0.568115	-0.553635	-0.576813	-0.4058	8.918846	4.5942	-7.8116	-0.828979	-2.25798	-0.614487	12.97971	0.214493	-0.721739	-1.092758	-0.530434	0.426086	-1.768112	-2.718842	-1.75943	-0.32753	-11.87247	-28.71014
Cl2_1	0.002899	0	0.03479	0.191315	0.24057	0.156521	-0.333344	2.391312	1.252174	2.756516	0.272461	0.330444	5.095657	1.918839	1.942032	-17.51594	-3.304348	0.275362	0.249268	5.295654	3.060867	-0.298538	-0.199997	-0.504349	-0.342041	0.895645	4.762314
Cl2_2	-0.515945	-0.359421	1.428986	0.084061	0.043488	0.852177	1.078262	1.927536	-0.27536	2.982613	1.379715	0.910156	0.286957	0.608704	1.127533	-22.96812	-5.739131	2.373913	-0.29274	5.289856	4.979713	-1.031891	-0.318832	0.411591	-0.231888	1.431885	4.620285
Cl2_3	0.756516	0.295654	-0.072464	-0.185501	-0.530441	0.289856	0.008698	4.159409	-1.049278	2.599998	1.379715	1.41449	-0.202896	1.217392	0.771011	-16.62029	0.289855	0.4	-0.197098	2.971016	0.028984	0.32753	-0.185501	0.321732	-0.028992	0.124649	-1.388412
Cl2_4	-0.255066	-0.994202	0.63768	-0.933334	-0.431885	-0.005795	-0.336227	3.565216	-1.605797	1.747826	1.194199	-0.197113	-0.663773	-0.582611	-1.394211	-19.49275	-3.478261	0.710145	-0.318848	3.133331	1.692757	-1.078262	-0.750717	-1.318832	-1.176819	1.252182	2.53334
Cl2_5	1.144928	0.634781	0.915939	0.385513	0.205795	-0.147823	0.41449	2.510147	-0.397102	2.623192	1.573914	0.649277	1.605804	1.927536	1.834778	-19.45507	-2.678261	0.185507	0.426086	4.657974	2.075363	1.020279	0.162323	0.104355	0.211594	1.710144	5.481155
Cl2_6	-0.066666	0.68985	0.05217	-0.542023	0.628983	0.02029	1.234787	2.768127	-1.344925	3.18261	2.284058	-1.46666	-0.159409	0.915939	-0.666656	-27.52464	-10.87246	1.771014	-0.988403	7.768112	4.055069	0.069565	0.057983	-0.831894	0.026093	2.298553	4.284058
Cl2_7	-0.628983	0.344925	1.736221	-0.014488	0.608704	0.133331	0.782608	3.391312	-1.640579	4.402893	1.91304	-0.382599	0.147827	0.77681	-0.026077	-21.32464	-6.081159	1.402899	-0.182602	5.347824	3.121742	0.226089	0.446381	0.75943	-0.095657	2.800003	2.246384
Phosgene_1	-0.39711	1.330429	-1.107254	0.504349	0.130432	0.385508	-0.252182	0.284058	-0.469559	0.191307	0.539131	0.513046	0.881149	-0.098541	-2.930435	0.142029	0.255073	0.202899	-0.17392	1.365215	0.272464	0.423203	0.278259	-0.933334	0.321732	-0.457962	-0.669556
Phosgene_2	-0.249268	-0.350723	0.773911	-0.03479	0.701447	0.544926	1.330429	0.055069	0.475357	-0.521744	0.095657	-1.402908	-0.191299	0.67247	-1.594193	0.452171	-0.086956	-0.017391	0.072464	0.286957	0.591301	-0.846375	-0.263763	0.510147	0.165207	-0.982605	-1.571014
Phosgene_3	0.756516	1.573914	1.455078	-0.200012	-0.365219	0.292755	-0.802902	0.05217	0.211601	0.599998	0.217392	-0.507248	-1.005798	-0.823181	-2.715942	-0.965218	-0.318841	0.173913	0.289856	-0.08696	0.36232	0.513046	-1.237686	0.092758	-0.733337	-1.159424	0.446381
Phosgene_4	-0.727539	-1.237686	-0.669556	-1.066666	-0.924637	-1.156521	-2.101456	-0.710144	-0.973915	-0.663765	-1.176819	-3.176819	0.362305	-1.202896	-4.475357	-0.744934	0.098551	-0.324638	-1.713043	-0.115936	0.443478	-1.582611	-1.684052	-3.834778	-0.991302	-1.846375	-1.492752
Phosgene_5	-0.344925	-0.026077	0.321732	-0.791306	0.037689	0.037682	-1.040588	-0.60289	0.49855	-0.469559	-1.057968	-0.657959	0.307236	-0.886948	-1.365219	-1.069565	0.110145	-0.089855	-0.156525	0.313042	0.495651	-0.799988	-0.278259	-1.034775	-0.904343	-0.495651	-0.988419
Phosgene_6	-1.657974	-2.289856	-0.643478	-0.559418	-1.710152	0.008698	-1.481155	-2.428986	0.133339	-1.037682	-2.072464	-1.727539	-3.318848	-4.440582	-5.942032	-1.530434	0.069565	-0.173913	-1.55072	-0.54203	1.298552	-1	-2.017395	-2.530441	-2.040588	-3.043488	-0.028992
Phosgene_7	1.243469	1.13913	1.950729	-0.391304	0.191299	-0.069565	-0.944931	-0.605804	-0.469559	-0.985512	0.089859	-0.39711	2.36232	-0.600006	-3.368118	-0.434784	0.02029	-0.223188	0.475372	-0.573914	0.142029	-1.037674	-0.382614	0.472458	-0.524643	-0.713043	0.678268
F2_1	1.023193	0.391312	2.411591	0.24057	-0.663773	0.423187	1.124634	1.762314	1.628983	1.330429	0.539139	0.72464	-0.313034	-0.962326	-0.078262	-18.98551	-0.391304	1.672464	0.997101	1.257973	0.698547	-0.313034	-0.373901	-0.649277	1.504333	0.747833	3.072464
F2_2	-0.05217	-0.347839	-0.037689	0.156525	-0.113045	-0.29565	0.234772	0.918839	2.200005	0.701447	0.127533	0.953629	0.669556	0.249283	-0.159409	-16.40869	2.507246	1.849275	0.634781	1.011589	0.628986	0.400009	0.084061	-0.820282	0.162323	1.382614	1.802887
F2_3	-0.060883	-0.237671	0.452179	-0.344925	-0.368103	0.211594	-0.684052	1.533325	1.440575	0.402893	0.008698	-0.243484	0.417389	0.324646	-0.069565	-15.63768	0.884058	1.478261	-0.101456	0.739128	0.411591	-0.286957	-0.626099	0.342026	-0.240585	0.284058	3.472458
F2_4	0.41449	1.005798	0.634781	1.246384	1.069565	-0.750725	0.255081	1.681168	2.521744	1.513046	1.194214	0.991302	-0.237686	0.284058	0.747818	-14.96232	1.162319	0.927536	0.666656	1.45797	1.336227	0.67247	0.617401	-0.597107	0.736237	-0.002899	2.791306
F2_5	-0.782608	0.060867	-1.043472	-0.371017	-0.518829	1.31884	-0.588409	2.330429	1.428986	0.773911	0.075363	0.446381	0.084061	-0.353622	-0.475372	-22.91595	-1.223188	1.246377	-0.110138	1.005791	-0.823189	-0.159424	-0.857971	1.153625	-0.852188	1.150726	2.243484
F2_6	-0.614487	0.072464	0.347824	0.063766	-0.457962	0.988407	1.020294	2.028992	1.411591	0.124641	0.353622	0.130432	-0.336227	-0.371017	-0.747818	-16.55652	0.721739	1.878261	0.353622	0.811592	-0.475357	1.289856	-0.31015	-0.031876	0.211594	1.469559	1.985504
F2_7	1.27536	0.057968	1.36232	0.005798	-0.744934	0.176815	0.101456	1.342026	1.669571	0.823189	0.689865	0.791306	0.289856	-0.44928	-0.924637	-16.50145	0.77971	1.513043	0.994202	0.449272	0.834785	0.269562	-0.176804	0.94783	1.217392	0.849274	2.852173
NO2_1	1.67247	2.788406	2.765213	1.428986	0.608696	0.127536	0.284058	0.747826	7.771011	1.113044	1.028984	-2.56813	6.286957	3.759415	-3.08696	-3.249275	3.689856	0.350725	0.892761	-0.356522	1.889856	0.942032	0.55072	0.420288	0.214493	2.1884	5.559418
NO2_2	0.924637	1.376816	2.524643	0.353622	0.33913	0.313044	0.313034	0.718826	3.008698	1.046376	0.185509	-3.536224	8.078262	5.886948	-3.553635	-3.846378	4.547826	0.388406	1.718842	-1.13623	1.724638	0.069565	-0.10144	0.626083	0	2.75943	4.886963
NO2_3	-0.333344	-0.026093	-0.144928	-0.478264	-0.214493	-0.388406	-0.147827	0.623184	7.17971	1.828985	1.220291	-3.385513	3.898544	0.315933	-7.58551	-2.640579	2.139131	-0.234782	-0.249283	-1.724636	-0.055073	-0.107254	-0.588409	0.165222	0.031891	1.359421	4.730438
NO2_4	-3.249268	-3.046371	-3.023193	-0.055069	-0.544926	-0.113043	-1.144928	0.75943	6.588409	1.643478	0.689854	-3.562317	6.304352	3.330444	-5.272461	-3.046375	3.292754	0.484058	-1.197113	-2.90435	1.333332	0.084061	-1.095657	-0.530426	0.162323	0.426086	4.159424
NO2_5	0.486954	0.298553	0.440582	0.857971	-0.008694	0.394203	0.426086	0.86377	7.234787	0.82029	0.197105	-3.582611	7.713043	4.797104	-5.228989	-2.843475	2.750724	-0.330435	-0.455078	-2.269566	1.663769	0.142029	0.614502	0.640579	0.924637	2.246368	6.10434
NO2_6	-0.26088	-1.597092	-0.028992	-0.530434	-0.165215	0.252172	-1.55072	-0.063766	5.660866	0.663767	-0.38261	-6.043488	6.814499	2.371017	-5.852188	-5.13623	2.823189	-0.536232	-1.51593	-2.324638	0.350725	-0.350723	-1.185516	-0.402908	-1.144928	1.400009	4.194199
NO2_7	-1.159424	-2.034775	-2.147827	-0.014496	-0.356522	-0.31884	-0.037674	-0.921738	5.976807	2.22319	0.23188	-3.886963	1.011597	-1.249283	-4.3797	-11.04927	1.965217	0.347826	-0.455078	-2.875362	1.602899	0.950729	0.17392	0.113037	1.01738	1.768112	4.139145
CH3NHNH2_1	0.411591	0.721741	-0.136246	1.127533	0.257973	-0.176811	0.426086	0.55072	1.020294	0.191307	-0.127533	1.634781	-0.243484	-0.220276	1.46376	2.623184	-0.533334	0.052174	2.272461	0.855072	-0.243477	1.246368	0.921738	0.524628	0.385513	-0.118835	-1.017395
CH3NHNH2_5	-0.585495	0.886948	-0.507248	-0.58551	0.423187	-0.226086	-0.704346	0.330429	1.17971	-0.124634	0.234787	-1.168106	-0.527542	-1.127533	0.110153	3.533333	1.078261	-0.310145	0.257965	0.721733	0.713043	-0.142029	0.402908	0.263779	0.13623	0.182617	-0.020279
CH3NHNH2_2	-0.144928	0.408707	1.663757	-0.736237	0.313049	1.162315	-0.118835	0.628983	1.156525	0.49855	0.759415	-0.565216	-0.307251	-0.199997	-0.985504	1.130432	0.356522	-0.078261	-0.081161	0.321739	0.646378	-0.944931	0.269562	1.808701	0.168121	-0.431885	-1.985504
CH3NHNH2_3	0.084061	0.324631	-0.484055	-0.066681	0.397102	0.63768	-0.39711	0.547821	-0.330437	0.020294	-0.49855	-0.289856	-0.997101	-0.066666	0.234787	1.379707	-0.171015	0.327536	0.246384	-0.376808	0.727537	-0.663773	0.50145	0.046387	-0.681152	-0.426086	-1.144928
CH3NHNH2_6	-0.228973	-0.211594	-0.765213	-2.118851	-3.460861	-2.324638	-0.898544	-0.084061	-0.950722	-0.524635	-0.379707	-2.197098	-0.988419	-0.73912	-2.289856	2.208694	0.165217	-0.707246	0.324631	-0.82029	0.292755	-0.791306	-1.075348	0.147827	-0.692764	-0.486954	-1.866669
CH3NHNH2_4	-0.043488	0.092758	0.733337	-0.153625	0.101456	0.214493	1.060867	0.469574	1.466667	0.443481	-0.298553	1.107239	-0.124634	-0.44928	0.173904	1.13913	0.614493	0.011594	0.063766	0.50724	1.54493	0.142029	-0.014496	-0.202896	0.133331	-0.623184	0.646378
CH3NHNH2_7	0.814484	1.060867	0.605789	-0.124641	0.339127	0.011597	0.101456	0.072464	0.13623	-0.26667	-0.01738	0.408691	-0.521744	-0.837677	-0.460876	1.788406	0.33913	0.443479	0.142029	0.594208	-0.002899	-0.10144	0.504349	-1.510147	-0.234772	-0.440582	-1.133331

	R19	G19	B19	R20	G20	B20	R21	G21	B21	R22	G22	B22	R23	G23	B23	R24	G24	B24	R25	G25	B25	R26	G26	B26	R27	G27	B27
SO2_1	-0.376816	-0.695648	-0.382614	-0.388412	-0.00869	0.646378	-0.408707	-0.315948	-0.243477	0.006667	0.255663	0.261115	0.144813	0.188986	0.540133	0.488429	0.666666	-0.223188	0.846375	0.234779	-0.06377	-0.205811	-0.353622	0.910156	-0.350723	0.373917	0.333328
SO2_2	0.440582	0.124649	-0.353622	-0.594208	-1.678261	-2.185509	0.530441	-0.249268	-0.252174	-0.347824	-0.002899	-0.202896	0.234787	0.107254	-1.420288	-0.263771	0.22029	0.136232	-0.202911	0.298553	0.211594	0.492752	-0.295639	-1.185501	1.197098	0.626083	2.011597
SO2_3	0.556519	-1.423187	0.115936	1.663773	2.17971	4.005798	-2.385513	-0.510147	-0.568123	-0.440578	-1.034782	-0.678253	-1.686966	-2.991302	-1.713043	-1.124641	-0.982609	-2.173912	0.150711	-0.747826	-1.055073	0.350723	-1.582611	-1.005798	-2.107254	0.063766	1.89566
SO2_4	0.41449	0.08696	0.773911	0.49855	-1.431885	-2.463768	0.797104	2.002899	1.492752	-0.220284	0.191299	-0.446365	0.808701	-0.162308	0.339127	0.063766	-0.350724	0.197101	1.069565	-0.063766	-1.727535	0.988403	0.205795	1.611603	0.255081	0.866669	-0.26088
SO2_5	-0.698547	-1.144928	0.933334	-0.933334	-1.101448	0.837681	-1.289856	-0.321747	-0.481155	-0.460876	-0.692757	-1.086945	-0.44928	-0.779709	-2.39711	-0.568115	-0.359421	-0.431884	-0.962311	-1.336235	-1.507248	-0.944931	-2.281158	2.330429	-4.168121	3.13913	15.23189
SO2_6	-0.730423	-0.397095	-1.518845	-0.544922	-0.107246	0.382608	-0.185516	-0.31884	0.698551	-0.84058	-0.623192	0.901459	-0.026077	0.037674	0.542023	-0.591305	0.437681	-0.234782	-0.162323	0.046379	0.12464	-0.217392	0.078262	0.759415	-0.10434	0.043472	0.904343
SO2_7	-0.159424	0.63768	-0.414505	0.017395	1.005798	-0.162319	0.771011	1.985504	-0.295647	-0.023186	0.495651	-0.153625	0.124634	0.950729	0.231873	0.249275	0.857971	0.405797	0.94783	1.49855	0.655071	0.36232	1.568115	0.118851	-0.385513	1.295654	2.168121
HCN_1	-0.556519	-0.333328	-1.936234	0.011597	0.336235	-0.449276	0.544922	-0.620293	-0.092751	0.046375	-0.202896	-1.976822	10.9884	8.562332	2.762314	-9.130436	-0.063768	-2.113044	-0.107254	-0.542027	0.115942	0.069565	-0.121735	-0.881165	-0.211594	2.118835	2.968109
HCN_2	1.130432	-0.594208	0.481171	0.330437	0.118843	0.588408	0.052185	-0.226089	-0.220291	0.026093	-0.014488	0.220291	4.44928	2.168106	1.040573	-6.828987	2.721739	1.924638	0.646378	-0.994202	1.150724	0.26088	-0.257965	1.950729	0.060867	1.588409	2.892746
HCN_3	2.228989	2.344925	1.252182	0.321739	-0.127541	0.26087	1.562317	-0.791306	0.144928	0.246376	0.53334	0.753616	10.59131	6.36232	2.707245	-4.944927	4.785507	2.597101	0.704346	0.101452	0.597101	1.336227	0.457977	-0.330429	1.365219	1.017395	4.365219
HCN_4	0.028976	0.289856	-1.701447	-0.217392	0.27536	-0.18261	-0.252167	0.286957	0.347824	0.072464	-0.014488	-0.333328	5.681152	4.53624	3.231888	-6.463768	5.652174	2.898551	-0.350723	-0.278263	-0.162319	-0.266663	0.272461	-1.24057	0.257965	1.292755	3.055084
HCN_5	-2.437683	-2.446365	-0.901459	0.298546	-0.005798	0.371014	0.698547	-0.249275	0.408699	0.715942	0.791306	-0.608704	9.246384	4.634781	2.347824	-6.194202	3.388406	2.362319	0.449265	-0.266666	-0.200001	-0.12175	-0.800003	1.762314	0.455078	-0.686951	-0.321732
HCN_6	-0.39711	-0.478256	-0.855072	-0.892754	-1.608696	-2.249275	-1.081146	-0.046371	-0.333336	0.005795	0.176811	-0.324631	6.344925	3.214493	2.078262	-6.220287	3.078261	2.078261	0.234787	0.449276	0.994202	0.165222	-0.828979	0.315948	-0.344925	2.339127	2.307251
HCN_7	0.469574	0.414505	-0.394196	-0.060875	0.417389	-0.544928	0.040573	0.228989	-0.049278	0.171013	0.231888	-1.237671	7.91304	3.950714	2.13913	-7.614494	5.249275	3.484058	0.649277	-1.33913	0.513043	0.255081	0.730438	-1.089844	0.185516	1.89856	2.486969
HF_1	-0.817383	-0.805801	-1.614487	-0.701447	-0.391304	-0.968117	-0.53334	-2.744926	-0.463768	0.002899	-0.594208	-3.008698	7.237686	2.118851	-1.347824	-3.602898	8.797102	1.33913	-0.124649	-2.472466	-0.54203	-1.347839	-0.617401	-2.67247	-1.008698	0.979706	2.600006
HF_2	-0.005798	-0.10434	-0.860855	-0.13623	0.121742	1.136232	0.843475	-0.973907	1.118835	0.159416	-0.397102	-0.484055	3.214493	2.747818	0.753632	-6.794205	10.8058	4.417392	-0.095642	-1.504345	-0.011593	-0.614487	-0.742035	0.513046	0.800003	1.455063	2.214493
HF_3	1.582611	0.472473	2.513046	1.46666	0.750717	0.208694	2.011597	0.484055	1.953621	0.753624	0.73333	0.927536	1.202896	1.394211	0.31015	-6.133335	7.133333	2.2	2.359421	-0.54203	1.028984	1.959412	0.985504	2.286957	1.823181	2.521744	5.678253
HF_4	-0.402893	-0.217392	-0.684052	0.176811	0.063766	0.594202	0.756531	-1.420288	0.907246	0.110142	-0.307251	-0.185501	4.997101	3.260864	0.988403	-0.846378	8.4	1.376812	0.736237	-2.043476	1.34203	0.055069	-0.82608	0.359421	0.318848	2.168106	3.82608
HF_5	-0.382614	0.440567	0.321732	-0.356522	-0.040581	0.066666	0.147827	-1.553627	0.823189	-0.081161	-0.014488	-1.228973	-0.101456	-0.092758	-3.657974	-4.197102	4.313043	-0.304348	0.220291	-2.026085	0.799999	-1.182617	-1.014496	0.197098	0.040573	1.455078	3.228989
HF_6	-0.765213	-1.295639	-3.423187	-0.078262	0.18261	0.484058	1.142029	-0.344933	1.133331	0.695656	-0.301453	-0.614487	4.423187	3.713043	-0.962326	-2.17971	4.489856	-0.185507	0.765213	-1.524639	0.71884	0.057983	-0.255066	0.185501	0.544922	1.107254	4.507248
HF_7	0.620285	-0.878265	-0.837677	0.208694	0.055069	0.866667	0.368118	-0.246376	1.252174	0.443481	0.400002	-0.104355	4.426086	3.478271	1.527527	-1.371017	4.226087	0.02029	1.936234	-0.263771	0.666668	-0.10434	-0.130432	0.284058	-0.028992	1.982605	3.118851
HNO3_1	-1.730438	-0.39711	-1.852173	-1.147827	-0.657967	-0.594202	-0.895645	-7.159424	-1.153618	-0.376812	-0.779709	0.176804	2.310135	2.889862	0.942032	-7.298546	0.944927	0.414493	-0.631882	-1.965218	-0.655073	-0.869568	-1.339127	-1.281158	-1.086945	1.315948	0.747833
HNO3_2	1.307251	2.281158	1.475357	1.402901	0.553627	0.072463	2.918854	-4.075363	1.365219	0.84058	1.527534	1.301453	6.072464	6.315933	4.431885	-6.124638	3.014493	2.495652	2.434784	-0.802898	1.284058	1.721741	1.028992	2.643478	1.817383	3.8116	7.446381
HNO3_3	-0.402893	-0.753632	-0.359421	-0.365219	0.066666	-0.188406	-0.36232	-2.63768	0.263767	-0.194202	0.278259	1.318848	1.744919	1.049286	2.915939	-5.136234	4.486957	2.266666	0.626083	-1.6	0.614492	-0.559418	-0.785507	-0.008698	-0.269562	1.797104	4.817398
HNO3_4	-1.730438	-0.39711	-1.852173	-1.147827	-0.657967	-0.594202	-0.895645	-7.159424	-1.153618	-0.376812	-0.779709	0.176804	2.310135	2.889862	0.942032	-7.298546	0.944927	0.414493	-0.631882	-1.965218	-0.655073	-0.869568	-1.339127	-1.281158	-1.086945	1.315948	0.747833
HNO3_5	-0.13913	-0.857971	1.939133	0.356522	0.510143	0.246376	0.269562	-1.686958	-0.17971	0.718838	0.31884	-0.391296	4.843475	4.22319	4.588409	-3.257969	0.686956	0.93913	0.292755	-0.675362	0.455072	0.640579	0.202896	-0.852173	-0.692749	1.915955	3.315933
HNO3_6	0.113037	0.63768	0.075363	1.086952	0.339134	1.026087	1.481155	-2.246376	0.550724	0.17971	0.663765	1.559418	6.110138	4.199997	6.744919	-3.336231	-0.06087	1.150725	0.976822	-0.31884	0.472464	0.820297	-0.144928	1.298553	1.142029	1.263763	2.857971
HNO3_7	-0.336227	-1.075363	0.104355	0.020287	0.13623	-0.704348	0.095657	-1.515945	0.805798	0.29565	0.54203	-1.162323	3.985504	3.011597	5.356522	-4.113041	1.313044	1.205797	-0.165207	-0.788406	0.797102	-0.756531	0.544937	-1.055069	0.153625	1.200012	3.008698
Hydrazine_1	-0.220291	0.594208	-2.092758	-0.373909	-0.281158	-0.257971	-1.037674	0.162323	-0.104347	0.391304	0.075363	-0.492752	-0.249283	-0.771011	-0.110153	0.585506	-0.947826	0.533333	-0.446365	0.423191	0.107246	0.339127	-0.686951	-1.652176	-0.736237	-1.176804	-4.176819
Hydrazine_2	-0.208694	-0.362305	-0.182617	-0.417389	-0.428986	0.301449	0.423187	0.110153	0.168114	0.794205	0.556519	-1.026093	-0.733337	-0.246368	1.095657	0.881161	-1.023188	0.907247	-0.472473	-0.008698	-0.281158	-0.136246	-0.46666	0.579712	0.675354	-1.359421	-4.889862
Hydrazine_3	0.628983	-0.614487	1.478256	-0.092758	0.165218	0.144928	0.489853	0.286957	-0.846382	0.394203	-0.269562	0.205811	-0.304337	0.36232	1.886963	1.211594	-0.776812	0.486957	-0.13623	0.017391	0.826088	-0.127548	0.026077	-0.420303	0.768112	-1.698547	-3.50145
Hydrazine_4	-0.431885	0.991302	-0.266663	-0.18261	-0.028984	0.156523	-0.194199	-0.144928	-0.730431	0.388405	0.327538	-0.692749	-0.710144	0.388397	-0.002899	1.376812	0.057971	0.562319	-0.031876	-0.026089	-0.098551	-0.962326	-0.179703	0.718842	0.060883	-1.773926	-5.913055
Hydrazine_5	-0.014496	-0.753632	-1.634781	0.26667	-0.423191	0.330435	0.698563	0.373909	0.828979	1.576813	0.397102	0.489853	0.939133	0.052185	-0.284058	2.991306	0.002899	0.84058	0.695663	-0.736233	-0.779711	0.226089	-0.32753	-0.037689	0.715927	-2.217392	-4.431885
Hydrazine_6	0.237686	1.489853	-0.179703	-0.99131	-0.414497	-0.35942	-0.710144	0.252182	0.701454	1.747833	1.08696	-1.96521	-0.684067	0.043472	1.220291	3.269566	0.397101	0.817391	0.243484	0.713043	0.455072	-0.226074	-0.243469	-0.869553	-0.747833	-1.988419	-4.704346
Hydrazine_7	-0.315933	-1.199997	-0.837677	0.237679	-0.640587	0.176811	-1.336243	-0.750717	0.988403	1.614494	-0.011589	-0.565216	-0.205795	-0.962311	-0.695648	3.385509	0.173913	0.034783	-0.556519	-0.356522	-0.240582	-0.194199	-0.507248	-0.747818	-0.675369	-2.544922	-5.281158

	R28	G28	B28	R29	G29	B29	R30	G30	B30	R31	G31	B31	R32	G32	B32	R33	G33	B33	R34	G34	B34	R35	G35	B35	R36	G36	B36
Control_1	-0.507248	-0.342026	-0.069565	0.339127	0.443481	-0.005798	-0.768112	0.217392	0.515942	-0.689986	0.072464	0.304348	-1.17758	-1.814496	-1.175362	-0.647392	0.027533	1.681152	-0.507248	0.400009	0	1.371014	1.385513	-0.663757	0.342028	0.54203	-2.110138
Control_2	-0.272476	-0.144928	0.953629	-0.327545	0.675369	-0.652176	-0.240585	-0.208694	0.208696	0.536232	0.023188	0.817398	-0.45507	-0.892754	1.200001	-1.034775	-0.440567	-2.005798	0.220291	0.536224	0.014493	-0.110144	0.110146	-0.956512	0.292754	0.255074	-0.611588
Control_3	-1.115936	0.336235	-0.173904	-0.530426	-0.017395	0.205795	-0.626083	0.881165	0.594203	-0.110145	0.368116	0.849274	-1.098549	-0.765213	0.547825	-0.550735	-0.933334	-0.744934	-0.773911	-0.301453	-0.292754	-0.057968	-0.05217	-0.426086	-0.139132	-0.339127	0.434784
Control_4	-0.73912	-0.371017	-0.049271	0.118851	0.571014	-0.524643	0.252182	0.449265	0.005797	0.139131	0.223188	0.284058	-1.217392	-0.779709	-0.452171	-0.185501	-0.576813	-2.133331	-0.147827	-0.246368	0.002897	0.289852	0.594208	-1.171005	0.391304	0.736229	-0.486954
Control_5	0.402893	-0.376816	0.371017	1.25798	0.208694	1.220291	0.921738	0.072464	-1.301449	0.481159	-0.066667	0.304352	-1.09565	-1.524643	1.286957	0.32753	-0.744919	1.907242	0.028976	-1.191299	0.640579	0.971016	0.408699	-0.020294	0.973913	0.849274	-0.202896
Control_6	-0.214493	-0.898552	0.002899	0.046387	-0.594208	1.878265	0.118835	0.142029	0.026087	0.060869	0.185507	0.643478	-1.266663	-1.968124	1.171005	-0.634781	-0.710144	0.228989	-0.753616	-1.460876	-0.895652	-0.084061	-0.09565	0.17392	0.771013	0.159424	-0.110138
Control_7	-0.281174	0.153625	0.571014	-0.168106	0.956512	-1.579712	-0.405792	-0.768127	-0.42029	0.162318	0.124638	-0.194199	-0.397102	-0.034782	1.298546	0.884064	-0.489853	1.565216	0.417389	-0.046387	0.205797	1.455072	1.486954	-0.846375	0.185509	0.26667	-0.553619
HCHO_1	0.649277	0.802895	1.307236	-0.220291	0.559433	-0.347824	0.089844	0.759415	-0.226087	0.101449	-0.127536	0.124634	-0.368118	-0.402893	0.904343	0.997101	0.037674	1.594208	1.185501	1.121735	0.046377	0.376808	0.260872	-0.950714	0.25507	0.365219	-2.257965
HCHO_2	-0.359421	0.217392	-0.260864	0.118835	-0.41449	-0.527542	-0.715942	0.188416	0.034783	-0.055072	0.168116	0.043472	-0.217392	0.228989	1.356522	-0.428986	-0.44928	-0.368118	-0.513031	-0.379715	0.707247	0.530434	0.710144	-0.197098	0.394203	0.715942	1.017395
HCHO_3	-0.86087	0.020294	0.269562	-1.484055	0.36232	-0.423187	-0.402893	-0.176819	-0.005797	-0.014493	0.147826	0.03479	0.489853	0.568115	1.336227	-0.286957	0.744934	-0.469559	-0.211594	-0.281158	0.42029	-0.020288	0.527534	-1.484055	0.272465	0.295654	-0.878265
HCHO_4	-0.791306	0.788406	-1.495651	-0.791306	-0.269562	0.495651	-0.078262	-0.005798	0.026087	-0.208695	-0.095652	1.043472	-1.368118	-0.889854	1.002892	-0.356522	-0.052185	-1.336227	-0.60289	0.736237	-0.481159	1.011597	0.568115	-0.046371	0.736233	0.437683	-0.631882
HCHO_5	-0.008682	0.742035	0.281174	0.49855	0.333344	0.159424	0.347839	0.286957	0	-0.034783	0.066667	1.072464	0.037682	0.321739	0.727531	0.718842	0.295654	-0.971024	-0.147827	0.342026	-0.011594	0.475365	0.385506	-1.547821	0.162319	0.055069	-0.747826
HCHO_6	0.104355	0.515945	1.173904	1.428986	0.333328	-0.371017	0.031876	0.055069	0	0.24058	-0.078261	1.10144	0.466667	0.260864	0.04348	0.504349	0.58551	-1.12175	0.205795	0.568115	-0.002899	0.315941	-0.310143	-2.495651	0.550726	0.394203	0.13623
HCHO_7	0.733322	0.875366	-0.481155	0.382614	0.956512	1.460861	0.594208	0.692749	0.011594	-0.031884	0.002899	1.344925	-0.54203	-0.194199	1.576813	1.284058	1.452164	1.753632	0.939133	0.657974	1.086957	0.513046	0.675362	0.550735	0.327536	0.927536	0.602905
Arsine_1	-0.118835	0.756523	-0.721741	-0.562317	0.611603	0.608704	0.797104	0.811592	0	0.113043	-0.034783	1.118835	-0.373917	-0.359421	1.426086	0.481171	1.121735	1.098541	-0.234787	0.173904	0.063768	0.933333	1.037683	-8.304352	0.315942	1.147827	-7.272469
Arsine_2	-0.252182	0.049274	-0.049286	-1.524628	0.208694	-1.649277	-1.275375	0.226089	0	-0.202899	0.078261	-0.591301	-0.652168	-0.017391	-0.475365	-0.591293	-0.292755	0.41449	-0.623184	-0.478256	0.171014	1.533333	1.562321	-10.73044	2.026087	1.771011	-8.889854
Arsine_3	-0.284058	-0.069569	0.118851	-1.171021	-0.202896	-1.695648	-1.072464	0.08696	0	0.049275	0.04058	-0.446373	-1.608696	-0.927536	-0.034782	-1.020294	-0.939133	-0.686951	-0.457962	-0.857971	0	0.504348	0.284058	-7.37101	0.217391	0.88406	-6.05217
Arsine_4	0.446365	0.313042	-0.014496	1.107239	0.866669	-0.727539	0.394211	0.620293	0.011594	0.031884	0.350724	0.249275	-0.411598	-0.397102	0.524635	0.869568	1.359421	2.063766	0.75943	0.431885	0	0.330435	0.220291	-6.515938	-0.107246	0.02029	-6.031883
Arsine_5	0.762329	0.727539	0.011597	-0.150726	0.55072	0.266663	0.750732	0.440582	0	0.008696	0.156522	0.118843	-0.205795	0.310146	0.402899	1.020279	1.353622	0.576813	1.278259	0.985519	0.060869	1.281159	1.513042	-8.652176	1.098551	1.559422	-7.750725
Arsine_6	-0.194199	-0.17971	1.266678	0.234787	-0.515945	0.907242	-1.191315	-0.234779	0	-0.014492	0.098551	0.976814	-0.568115	-0.208694	0.220289	0.350723	1.304337	0.098541	0.078262	0.063766	0	1.034782	0.698551	-7.428986	0.573913	1.060867	-5.979706
Arsine_7	0.437683	0.486954	0.249283	0.324631	-0.988403	-1.107254	0.269562	-0.597107	0	0.234782	-0.136232	1.127533	-0.327538	-0.481159	0.553623	0.513046	0.22319	-0.933334	0.037674	0.626083	-0.121739	2.971014	2.942028	-11.61449	1.942028	1.756516	-8.646378
Phosphine_1	-0.944931	-1.144928	-1.179703	-0.078262	-0.988403	0.623199	-1.243469	-0.507248	-0.147826	-1.872464	-1.953623	-0.646378	0.414497	1.011597	0.976814	-2.255066	0.315948	-1.875366	-0.626099	-2.933334	-3.434782	8.55652	6.713043	-31.0116	5.301449	2.765217	-21.16522
Phosphine_2	-0.655075	0.31884	-0.82608	-0.571014	-0.600006	-1.1884	-0.110138	-0.057968	0.034783	-0.559421	-0.121739	-0.176811	-1.199997	-0.826088	0.026089	-1.86087	-1.298553	-1.739136	-1.39711	-1.788406	-0.849274	2.82029	2.202898	-22.8	0.681159	-0.237679	-17.54203
Phosphine_3	-0.191299	1.797104	-0.324631	-0.373917	-1.049286	-2.36232	-2.753616	-1.443481	0.156522	0.185508	-0.098551	-0.188408	3.782608	4.353622	5.759422	0.747818	0.556519	-0.513046	-1.092743	-0.971024	2.90145	4.994204	3.356522	-24.54783	3.284058	1.65797	-16.4116
Phosphine_4	-0.597107	0.121738	-0.217377	-0.443481	-0.817383	-2.057968	-0.68985	-0.655067	0.014493	0.44058	-0.084058	0.689857	-0.272469	-0.799999	0.466667	0.127548	-1.669571	-0.750717	0.1884	-0.266663	-0.069565	2.785507	2.072464	-25.08406	0.344928	-0.550724	-17.28986
Phosphine_5	-1.142029	0.443478	-1.347824	-1.440582	-2.144928	-1.820282	-1.8116	-1.147827	-0.026087	-0.220289	-0.168116	-1.194206	-1.901443	-1.017391	-0.194204	-1.231888	-2.017395	-1.455063	-2.014481	-1.959427	-0.008696	2.62029	1.205797	-23.36521	0.275362	-0.417391	-15.7942
Phosphine_6	-1.971008	-1.162319	-1.968109	-3.057968	-2.455078	-3.05217	-2.237686	-1.263771	0	-0.472464	-0.284058	-0.959419	-1.31015	-0.840576	0.707245	-2.200012	-2.072464	-2.915939	-2.478256	-3.820297	0.005797	3.171014	2.171015	-21.76232	4.73913	1.272461	-17.3913
Phosphine_7	-0.982605	-0.698551	-0.179703	-1.927536	-1.515945	-0.211594	-2.072464	0.202896	0.005797	-0.031884	-0.318841	0.486961	-1.086952	-0.971012	-0.602898	-1.915939	-1.657974	-0.014481	-1.779709	-1.457977	0	0.62029	0.124638	-17.01739	0.765217	-0.194202	-15.48985
Diborane_1	1.084061	0.118843	0.136246	0.576813	1.228989	1.437683	1.356522	0.86087	0.031884	-0.208695	-0.031884	0	0.026085	-0.176811	-0.440578	0.950729	1.249283	0.50145	-0.026093	1.081161	-0.069565	0.043478	0.411594	-0.8116	-2.147826	-2.571014	-2.614494
Diborane_2	1.028976	0.133331	0.63768	1.127533	0.715942	1.884064	0.684067	0.617393	0.510145	-0.121739	0.423189	0.95652	0.301453	1.057972	0.675362	0.228989	0.249283	2.997101	-0.176804	-0.313049	0	0.284058	0.072464	-1.344925	-0.113043	-0.130436	-1.91304
Diborane_3	-0.568115	0.121738	-0.034775	0.402893	-0.315933	-1.310135	-0.889847	0.321739	0	-0.556521	-0.2	-0.382614	0.220291	0.307247	-0.344927	-1.133331	0.60289	0.026093	-0.226089	0.304352	0	0.063768	0.02029	-2.857971	0	-0.075363	-0.884056
Diborane_4	0.260864	0.686954	0.060867	0.066666	0.017395	0.217392	0.263779	0.113037	0	0.440579	0.115942	1.399994	0.742027	0.081161	-0.68116	-0.08696	-0.168106	-1.231888	0.318848	-0.182602	0.011594	0.631884	0.214493	0.185501	0.107246	-0.237679	-1.666672
Diborane_5	-0.063766	-0.605797	-0.478256	-1.284058	-0.640579	-0.153625	-0.797104	-1.759422	0.008696	-1.188406	-1.052174	-0.96521	-0.466667	-0.249275	-0.188404	0.399994	-1.055069	-2.820297	-0.89566	-1.365219	-0.362319	-0.3971	-0.747829	-1.023193	-0.872463	-1.765221	-2.359421
Diborane_6	-0.185516	-0.742027	-1.420288	-1.518845	-0.092758	-2.121735	-1.855072	-1.04348	0	-0.08116	-0.04058	-0.011597	-0.408699	-0.260868	-0.237682	-1.243469	-0.768112	-2.020279	-0.930435	-1.771011	0	-0.385507	-0.142029	-1.620293	-0.318841	-0.97971	-1.831879
Diborane_7	1.249268	0.68116	2.031876	0.895645	2.055069	2.50145	-0.089844	0.107246	-0.895652	0.463768	0.492754	2.336235	1.843483	1.347824	0.431885	2.249268	2.327545	1.872467	1.405792	2.095657	0.428986	-0.191305	-0.156521	0.408691	-2.713043	-1.802895	-1.084061
H2S_1	1.304352	0.788406	0.133331	0.715942	0.110138	-0.704346	1.342026	0.54493	0	0.086956	0.246377	0.124641	10.97391	10.02898	-3.689857	-0.388397	-11.49275	-39.02319	1.724625	-12.95361	0.063768	147.0522	93.2058	-108.6145	105.7913	51.08695	-84.18841
H2S_2	0.939133	-0.434784	-0.336227	0.976807	-0.324646	-0.756516	0.063766	0.023193	0.002899	-0.6	-0.594203	-0.113037	12.36812	12.3971	-2.771015	0.979706	-13.47536	-40.49855	2.226089	-8.655075	2	146.658	87.11014	-107.3826	139.742	53.80579	-82.11594
H2S_3	0.043488	-0.008698	-0.057968	-0.478256	0.376816	0.252182	-0.197098	0.069565	0	-0.086957	0.005797	0.750732	11.06667	11.6116	-3.631886	0.118835	-10.12753	-37.37972	0.840576	-6.614487	0	140.258	88.04347	-105.2145	101.9015	47.25797	-75.61159
H2S_4	-0.156525	-0.13913	-2.231888	-0.643478	-1.295654	1.701447	-1.521744	-0.310143	0	0.721739	0.869565	0.82029	10.11305	10.13913	-2.892754	1.423187	-9.008698	-34.30145	-0.278259	-8.872452	-0.150725	150.2812	95.77392	-111.1623	97.5884	54.10435	-84.75942
H2S_5	0.133331	1.086952	-1.081161	0.226089	0.539139	1.544922	-0.382599	0.472473	0.553623	0.127537	0.286956	0.185501	11.86087	12.71594	-3.446381	0.510147	-11.50435	-38.95363	1.913055	-12.04349	1.194202	150.1362	95.16522	-110.0841	129.7739	56.32755	-83.04349
H2S_6	-0.147827	0.379707	-1.011597	1.031891	0.797104	0.886948	1.246368	0.53624	0	0.826087	1.008696	2.234787	10.57971	11.62898	-2.069569	1.063782	-10.27826	-35.78551	0.924637	-14.89565	2.168116	143.5362	88.27247	-104.3043	136.0406	55.55362	-89.15653
H2S_7	0.202896	-0.144928	-0.542023	0.417389	-0.011597	0.921738	0.020294	1.089859	0.043478	0.588406	0.828985	1.582611	9.976807	9.886955	-2.200001	0.962326	-9.591309	-33.79131	1.556519	-11.70145	0.002899	154.3826	99.10725	-113.171	77.18551	48.78841	-77.88986
(CH3)2NH_1	-0.069565	-0.414497	0.292755	-0.217392	-0.857971	-0.402893	-0.168106	0.246384	-0.043478	0.223188	0.284058	1.333328	-1.437683	-0.837685	-1.09565	-0.802887	-0.48407	-0.857956	-9.788406	-21.3942	0.443478	-2.113041	-6.463768	5.594208	-2.791306	-7.020287	5.77681
(CH3)2NH_2	-1.040573	-0.27536	-1.544922	-1.376816	-1.504349	0.550735	-2.562317	-0.13044	0.017391	-0.197101	0.043478	2.098557	-1.759422	-1.333336	0.17971	-0.94783	-0.646378	-1.747818	-11.49565	-21.61739	0.031884	-1.724638	-5.275364	8.313049	-1.849275	-5.376808	6.089851
(CH3)2NH_3	-0.942017	0.078255	0.31015	-1.507248	-0.388397	-1.321747	-0.843475	0.269562	0	-0.069565	0.063768	1.324646	-0.634781	-1.510147	0.226086	-0.660873	0.011597	-1.518845	-12.33333	-22.24059	0.002899	-2.443478	-5.21159	5.918839	-2.689854	-7.269569	6.495667
(CH3)2NH_4	-0.356522	-1.368118	-0.005798	-0.373917	-0.043488	1.002899	-0.533325	0.724632	0.066667	0.055073	0.046377	0.884064	-1.527534	-1.666664	0.553623	0.057983	-0.634781	-0.765213	-10.9971	-22.51595	0.069565	-2.307247	-5.611595	8.904358	-1.02029	-5.373917	5.162323
(CH3)2NH_5	1.681152	0.742035	1.608704	1.055069	1.423187	1.176804	0.165222	2.269562	-0.008696	0.466667	0.205797	2.066666	0.197098	-0.200005	1.104347	1.892761	1.124649	1.460861	-9.394211	-21.14203	0.313043	-2.066668	-5.185509	10.26088	-1.657972	-5.342033	8.113052
(CH3)2NH_6	-1.055069	-0.872467	-1.70726	-2.495651	-1.686951	0.098557	-1.41449	-0.27536	0.043478	-0.394203	-0.02029	0.828979	-1.675362	-1.31884	0.739136	-1.48407	-1.762314	-0.779709	-10.96812	-22.20869	0.037681	-1.37681	-5.826088	5.973923	-1.263769	-6.426086	4.588409
(CH3)2NH_7	0.591293	-0.582611	1.249283	-0.901443	0.339142	1.211594	-0.402908	1.315948	0	-0.13913	0.031884	2.666672	-0.153618	0.214493	2.695648	0.266678	-0.281158	0.930435	-10.08695	-21.77971	0	-1.704348	-4.466663	6.489853	-1.026087	-4.707245	4.17971
(CH3)3N_1	-0.869568	-0.773911	-0.307236	-1.176819	-0.486969	0.03479	-1.666656	0.837692	-0.382609	-0.223188	-0.115942	0.527542	-1.301445	-1.707245	-1.243477	-0.802902	-0.759415	-1.547821	-4.756531	-7.568115	0.53913	-5.562317	-6.602898	11.94783	-2.768116	-5.944931	7.179718
(CH3)3N_2	-0.594208	-0.162315	-0.063766	-0.286957	0.91304	1.857971	0.243484	0.011597	-0.13913	-0.121739	0.066667	1.098557	-0.304352	-0.272461	0.530434	1.527542	2.005798	1.86377	-1.32753	-5.05217	1.153624	-3.794205	-4.553627	10.28986	-2.055073	-4.171021	7.347824
(CH3)3N_3	0.005798	-0.275368	-0.98262	0.214493	0.179718	1.402908	0.469574	1.002899	0.217391	0.342029	-0.005797	0.356522	-0.423195	-0.962318	1.049274	0.86377	-0.373917	0.568115	-2.026077	-3.744919	-0.02319	-4.649275	-5.63768	10.8087	-2.4	-4.991302	6.49855
(CH3)3N_4	-2.927536	-1.562317	-3.698547	-2.857971	-2.950729	-1.626083	-3.713043	-2.466675	0.144928	-0.614493	-0.104348	-0.597107	-3.110146	-2.828987	-0.866669	-2.750717	-2.855072	-1.460861	-5.385513	-7.971008	0.50145	-4.646374	-6.599998	8.084061	-4.834782	-7.460869	4.014496
(CH3)3N_5	0.066666	-0.217392	0.73912	-0.646378	-0.133331	1.014496	-0.857971	1.060883	-0.197101	-0.17971	0.028986	2.179703	0.591309	-0.304352	0.823189	-0.744934	-0.08696	-0.255066	-2.176819	-4.446365	0.910145	-3.066668	-3.663765	9.808701	-2.376812	-3.234787	5.689865
(CH3)3N_6	-1.368118	-0.86087	-1.321732	-0.713043	-0.788406	-1.739136	-2.77681	-0.234787	-0.046377	0.057971	0.313043	0.359421	-1.359421	-0.411598	-1.046379	-1.721741	-1.666672	0.011597	-3.405807	-6.057968	0.136232	-3.272465	-4.09565	9.539139	-3.330435	-4.86956	6.579712
(CH3)3N_7	0.434784	0.359421	-0.831879	-1.942032	0.127533	-0.014496	0.095657	1.249268	0.356522	-0.301449	0.104348	-0.420288	-1.162323	-0.86956	0.426086	-1.336227	0.095657	-0.855072	-1.991302	-4.808701	-0.092754	-1.826086	-1.831886	9.147827	-0.837681	-2.45507	6.605789

	R28	G28	B28	R29	G29	B29	R30	G30	B30	R31	G31	B31	R32	G32	B32	R33	G33	B33	R34	G34	B34	R35	G35	B35	R36	G36	B36
Ammonia_1	-3.130432	-0.834785	-1.86087	-1.797089	-0.46376	-2.875366	-3.524643	-0.710159	0.043478	-0.240966	-0.184058	-1.062112	-1.453416	-1.881154	-0.954792	-0.637689	-0.643478	-13.98552	-26.45508	3.678261	0.623188	-9.13913	7.684052	1.455072	-11.30145	7.704346
Ammonia_2	-2.043472	-0.579712	-2.249283	-2.692749	-0.823181	-4.976807	-4.081161	-2.037674	0	0.04058	-0.231884	-0.710144	-1.388405	-1.863762	-0.118839	-1.808701	-3.411606	-4.121735	-13.1884	-25.86665	0.42029	2.194202	-6.472466	5.875366	1.666668	-11.96812	7.011597
Ammonia_3	-3.260864	-1.655075	-1.675369	-2.895645	-1.475357	-2.49855	-4.318848	-0.782608	0.002899	-0.13913	-0.005797	0.15361	-0.657974	-0.469566	0.359421	-2.165222	-1.814499	-2.055069	-15.05217	-28.82318	4.823189	-0.652172	-11.47826	12.14203	-0.057971	-9.266666	8.90435
Ammonia_4	-1.150726	1.539131	-0.118851	0.263779	2.118835	-0.255081	-1.820282	0.179718	0	-0.507246	-0.104348	0.452164	0.153625	0.524635	3.124634	-0.298553	-0.600006	1.284058	-11.05798	-22.13333	0.37971	1.944927	-6.733334	7.530426	1.614492	-9.823181	6.944931
Ammonia_5	-1.985504	-0.115944	-1.034775	-1.257965	1.075363	-1.391312	-1.266663	0.226089	-0.023188	-0.034783	0.052174	-0.382614	-1.550728	-1.228989	-0.631886	-2.011597	-1.608688	-1.886948	-12.14203	-23.58551	0.17971	0.237682	-8.208694	7.997101	0.92174	-10.56812	9.249283
Ammonia_6	-3.553635	-1.115944	-2.017395	-2.602905	-2.115936	-2.747833	-3.17392	-1.930435	0.342029	-0.156522	0.005797	-0.782608	-2.095657	-1.046379	-1.081161	-2.692764	-2.762314	-2.12175	-13.53624	-24.70435	3.342029	1.68116	-9.086952	5.01738	3.005798	-11.54203	5.820282
Ammonia_7	-1.614502	-1.446381	0.402893	-0.521729	1.037674	-0.127548	2.495651	2.266663	-0.202899	0.35942	0.04058	-1.243484	-0.973907	-0.295654	-0.739136	-0.652176	-1.875366	-1.031891	-9.417389	-21.68987	0.284058	2.626087	-5.260868	5.727539	1.208695	-8.246376	5.043472
HCl_1	-9.431885	1.440575	-3.484055	-0.617386	-3.684067	-4.660873	-2.040588	-1	0.043478	-0.197101	-0.06087	-0.434784	12.65508	-2.895653	-0.718842	-1.008698	-1.260864	-1.730438	7.440582	-134.4928	24.93044	85.24348	67.14783	-74.97392	66.96522	47.10146	-48.88116
HCl_2	-7.956528	2.144928	0.165222	-0.443481	-3.991302	-2.994202	0.028992	-1.005798	-0.913043	-0.460869	0.110145	0.292755	13.11304	-1.362312	0.49855	-0.144928	0.257965	1.269577	8.081161	-130.3739	26.82319	95.42899	70.41738	-66.53914	95.70145	49.89276	-56.76521
HCl_3	-8.246368	0.779709	0.823181	-0.023193	-1.568115	-2.788406	0.13913	0.301453	0.005797	0.156522	0.069565	-0.220291	12.40579	-2.408691	0.426086	1.344925	-0.249268	-0.939133	7.379715	-141.2696	19.46667	103.4174	77.49565	-80.34782	83.10725	52.62318	-57.80869
HCl_4	-10.45798	1.118843	-1.872467	-4.13623	-5.617386	-7.043488	-3.672455	-3.492752	-0.095652	-0.686957	-0.185507	-0.342026	9.515945	-5.791306	0.782608	-1.884064	-2.846375	-0.211594	5.005798	-127.8116	25.88696	112.4203	76.84058	-72.90145	83.43189	45.92753	-51.84348
HCl_5	-10.73914	1.385506	-2.55072	-1.747833	-4.544922	-3.660873	-2.623184	-1.634781	-0.356522	0.307247	0.06087	-0.460876	10.55073	-2.36232	0.304348	0.347824	-2.460876	-0.762314	5.692749	-131.971	21.78551	97.93044	72.61449	-81.68116	82.08986	47.6116	-49.06667
HCl_6	-11.2	2.446381	0.049271	-0.185516	-2.686966	-2.455078	-0.892761	-1.144928	0.17971	-0.081159	0.092754	0.86377	11.31594	-3.72464	2.718845	-0.469559	-0.89856	1.753616	6.959412	-129.771	15.66377	95.0087	71.36812	-77.86087	72.34493	45.95361	-45.47826
HCl_7	-13.66957	2.646378	-2.950729	-1.675369	-3.698547	-4.814499	-2.773911	-3.075363	-0.939131	-0.704348	-0.197101	-4.588409	7.779709	-9.481163	1.240578	-3.324631	-4.547821	-5.13623	3.472458	-135.3275	18.91304	107.4899	75.7971	-75.28117	97.71884	47.71594	-43.27827
(CH3)NH2_1	-1.571014	-1.565216	-0.492752	-1.86087	-1.084061	-1.147827	-3.081161	0.052185	-0.084058	-0.063768	-0.023188	0.600006	-1.973907	-0.611595	-0.101448	-1.397095	-0.385498	0.504349	-9.849274	-19.11304	4.614492	-1.052177	-6.718842	6.359421	0.014492	-7.431885	4.115936
(CH3)NH2_2	-0.217392	0.034782	-1.315933	-0.704361	-0.834778	-1.652161	-1.58551	0.168121	0.04058	0.194203	-0.084058	0.521729	-0.701454	-0.562317	-0.379711	-1.608704	-0.733337	-0.971024	-13.6116	-26.95363	0.194203	-0.73913	-5.034782	2.246384	0.095652	-7.869568	2.533325
(CH3)NH2_3	-0.927536	-0.739128	-0.110153	-0.069565	-0.185501	0.417389	-0.930435	0.066666	0.159421	0.04058	0.202899	1.649277	-1.605804	-1.371017	1.307243	-1.379715	-0.628983	1.805801	-9.55072	-20.72174	4.924637	0.666664	-5.582611	2.814484	2.092754	-5.942024	3.237686
(CH3)NH2_4	-0.701462	-0.553619	0.626083	-0.382599	-0.040573	-0.063766	-0.744934	0.875351	-0.428985	0.347826	0.426087	1.115952	-0.075363	-0.571014	0.168114	-0.014496	-0.950714	-0.075348	-9.800003	-20.91016	2.57971	-0.475365	-7.739136	4.25798	1.852173	-8.008698	3.849274
(CH3)NH2_5	0.011597	-0.231884	-0.237671	-0.649277	-0.594193	0.402893	-0.446365	0.965218	0	-0.144928	0.127536	1.428986	0.092758	0.34203	0.901449	0.142029	-0.576813	-0.55072	-13.88986	-28.16811	0	0.243478	-4.443481	3.921738	0.063768	-5.373913	2.663765
(CH3)NH2_6	-0.078262	-1.675362	-0.86087	-1.159409	-1.417389	0.27536	-1.814499	-0.930435	-0.672464	-0.142029	0.234783	0.081161	-0.571014	-0.971016	-0.081158	-1.084061	-2.101456	-0.518845	-14.02609	-31.3971	0	0.289854	-4.527538	3.252167	0.944928	-5.599998	1.069565
(CH3)NH2_7	0.005798	-0.968117	0.24057	0.446381	-0.391296	-1.292755	-0.892761	0.913048	0	0.026087	-0.321739	1.434784	-1.069565	-1.214493	-0.350723	-0.608688	-0.573914	1.365219	-14.36232	-29.48406	0	0.634783	-4.776814	3.237686	0.910145	-5.133331	2.41449
Cl2_1	-5.075363	7.121742	-4.333328	0.089859	-0.368118	1.63768	-0.1884	-15.84058	5.660869	-0.304348	0.385508	-9.098541	6.805801	5.388405	-1.388405	-0.113037	0.266678	1.037674	1.791306	-8.684067	1.660869	17.52464	13.72174	-16.88695	14.12464	10.42609	-12.89276
Cl2_2	-5.686951	8.513046	-3.794205	-1.246384	0.695648	0.582611	-0.985504	-17.47536	6.156522	-1.394203	-0.501449	-11.31015	4.057968	4.86377	0.579708	-0.214493	-0.515945	0.255066	0.460876	-5.078262	1.959421	13.45217	11.06667	-14.44638	11.96522	8.605797	-9.765213
Cl2_3	-5.779709	13.45218	-7.037689	0.486954	0.142029	0.710144	-1.791306	-17.24059	5.863768	-0.921739	-0.304348	-11.46666	2.750732	4.269562	1.591301	0.342026	1.50145	-0.715942	0.388397	-15.6348	3.510145	11.26667	10.3971	-10.28986	8.092754	7.579704	-6.362328
Cl2_4	-7.904343	7.17971	-4.779709	-0.91304	0.530441	-1.373917	-2.336243	-17.10725	4.6	-1.037681	-0.063768	-8.469559	5.049278	3.927536	-1.231888	-1.779709	-0.072464	-1.788406	-0.475372	-6.353622	0.895652	11.74783	10.8	-12.92754	11.45797	9.356522	-9.321732
Cl2_5	-5.808685	7.744926	-3.020294	0.26088	0.89856	0.791306	-0.284058	-16.09276	1.75942	-1.234782	-0.15942	-9.892761	5.214493	5.214493	-0.672466	-0.191299	0.765228	0.095657	0.588409	-4.747818	4.863768	16.68696	13.46377	-18.04347	14.57391	9.779709	-13.06087
Cl2_6	-5.202896	10.90724	-5.568115	-0.440582	1.678253	-0.078262	-0.217392	-17.46376	7.144928	-1.368116	-0.115942	-12.49855	4.953613	5.492752	2.866661	0.371017	0.431885	0.281158	0.420288	-5.431885	1.742029	18.66087	14.27246	-15.68117	17.34493	11.20001	-11.77391
Cl2_7	-6.266678	11.67826	-6.539124	0.011597	0.86377	0.202896	-0.547836	-17.26088	4.994204	-0.768116	-0.356522	-9.765213	6.333336	5.263771	-0.208694	0.336227	0.973907	-3.385513	1.05217	-4.799988	0.91884	15.56812	12.96232	-12.07536	13.95942	11.57681	-10.0145
Phosgene_1	-0.162323	0.066666	1.484055	-0.640579	-0.234787	-0.313049	-1.25798	-0.040581	-0.002899	0.066667	0.373913	0.799995	0.927536	0.727535	-0.118843	-0.069565	0.150726	-1.315948	-0.886948	-0.313049	0	-0.385508	-0.411594	-0.08696	0.26087	0.365219	0.115944
Phosgene_2	-0.324631	0.142029	-0.597107	-0.333328	0.649277	-0.228973	-0.092758	1.162308	1.031884	0.162319	-0.127536	0.753616	-0.327538	-0.075363	0.881157	0.228989	-0.13913	0.191299	-0.643478	0.82608	-0.095652	-0.162319	-0.08696	0.904358	-0.07826	-0.626091	0.336227
Phosgene_3	-0.753632	-0.081154	-1.510147	-0.808685	-0.457977	-0.469574	-1.13623	0.095657	0.205797	0.333333	0.156522	1.060867	0.962318	0.110146	-0.252174	-0.985519	-1.27536	-1.075363	-1.547836	-0.794205	0.165217	-0.110146	0.005798	-0.507233	-0.481159	-1	-0.234787
Phosgene_4	-2.199997	-0.907249	-2.553635	-2.113037	-2.304352	-2.263763	-2.037674	-1.660858	0.13913	-0.147826	0.098551	-1.060867	1.730431	1.68116	2.431885	-1.718842	-1.249268	-2.591309	-2.089844	-2.246384	-0.107246	-1.45797	-2.484055	-1.771011	-1.971016	-2.49855	-2.39711
Phosgene_5	-1.289856	0.014488	-0.944931	-1.594193	-1.51593	-1.034775	-3.147827	-1.289856	-0.2	0.582609	0.2	0.31015	0.72464	0.492752	0.098549	-1.217392	-1.243484	0.040588	-0.907242	-0.547836	-0.130435	-0.049274	-0.686951	-0.455078	-0.55652	-1.031883	-0.852173
Phosgene_6	-2.434784	-1.692749	-1.504349	-3.298553	-3.457977	-2.68985	-2.411606	-2.886963	1.092754	-0.136232	-0.037681	-0.776825	-0.539131	-0.417397	-0.185505	-1	-2.898544	-0.579712	-3.32753	-3.452179	0.405797	-0.246376	-1.194206	-2.686951	-0.136232	-1.918839	-2.234787
Phosgene_7	-1.388397	0.09565	0.727539	-0.756516	-0.82608	-0.921738	-1.301453	-0.991302	0.023188	0.252174	0.04058	-0.379715	0.075356	0.472466	1.805798	-0.455078	-0.872452	-0.942032	-1.13913	-1.202896	0.942029	-0.420292	-0.678261	0.74202	0.831884	0.756523	-0.057968
F2_1	-2.962326	2.402901	-0.762314	-0.507248	-0.484055	-0.921753	-1.272461	-9.67247	0.84058	-0.576811	-0.002899	-5.011597	3.759415	4.608696	-1.942032	1.22319	-0.286957	0.544922	1.773926	-13.92754	2.979711	7.533333	6.194206	-10.40001	6.202896	5.026093	-7.098557
F2_2	-3.365219	3.057968	-0.382599	0.921738	-0.040573	0.266663	0.101456	-8.124641	0	-0.211594	-0.298551	-4.472458	3.417389	2.576813	-3.350723	-0.084061	-0.284073	0.289856	1.05217	-11.33043	2.460869	6.037682	4.4058	-7.747818	6.524635	4.527534	-7.773918
F2_3	-2.89566	2.484055	-2.353622	0.173904	-0.034775	0.75943	0.281158	-7.846367	0.092754	-0.162319	0.095652	-3.924637	3.356522	3.994209	-0.504349	0.597107	-0.03479	1.202896	0.872467	-12.49855	1.498551	3.28406	2.901451	-4.513046	3.484058	2.643478	-3.956528
F2_4	-2.936218	2.217384	-0.582611	-0.594208	0.130432	0.113052	0.640579	-8.147827	1.255073	-0.4	-0.034783	-3.350731	4.115936	3.727539	-0.773911	1.342026	-0.037674	0.005798	0.173904	-7.162323	1.324638	5.113045	4.298553	-7.330429	6.086956	4.002899	-5.710144
F2_5	-3.747818	2.799995	-0.521744	-0.684052	-0.069565	-0.394211	-0.582611	-9.168121	0.672464	-0.843478	0.292754	-5.179703	3.669556	3.939133	-0.269562	-0.228989	0.08696	-0.405807	0.397095	-12.28986	3.443479	6.414494	4.959419	-8.084061	5.515942	4.373917	-7.411591
F2_6	-2.997101	3.08696	-0.269562	-0.628983	-0.744934	-0.402908	-0.249283	-8.298553	0.455072	-0.550725	-0.110145	-4.750717	4.814484	5.252174	-0.188408	1.107239	0.492752	0.460876	0.739136	-11.07536	2.898551	4.168114	3.388405	-6.373917	3.982611	3.324638	-3.884056
F2_7	-2.96521	2.327538	-0.150726	1.144928	-0.89566	0.066666	0.669556	-8.939133	0.017391	-0.321739	-0.066667	-3.794189	4.12175	4.324631	-0.034782	0.530426	-0.165222	-0.921738	1.01738	-10.40289	1.484058	5.400002	4.026085	-6.94783	4.971016	3.249275	-4.782608
NO2_1	-1.460876	1.185509	1.327545	0.684052	0.455063	2.240585	-0.304352	-1.231888	-0.310145	-0.701449	0.095652	-7.730438	8.666664	4.730434	-0.533335	0.475357	-1.397095	1.072464	10.47537	-115.6232	11.53623	73.8058	61.03188	-45.6	44.24638	37.26956	-35.26086
NO2_2	-1.72464	0.321739	-0.266663	-0.515945	-0.318848	-0.924637	-1.27536	-1.118835	-0.443478	-0.121739	0.565217	-7.002899	5.901451	4.185507	1.147827	0.046371	0.084061	-0.394196	7.805801	-98.0145	8.008696	64.33043	54.73334	-41.82899	48.88406	33.90434	-30.18261
NO2_3	-2.281158	0.371014	-1.240585	0.150726	-0.959427	-0.684052	-1.295654	0.121742	0.04058	-0.449275	0.130435	-9.646378	6.226089	4.075363	-0.75942	0.144928	-0.89856	0.182602	6.866669	-97.27535	1.243478	40.84348	38.91304	-36.46087	32.02319	29.24348	-25.6087
NO2_4	-2.689865	0.857971	-1.049271	-1	-1.962311	-2.889847	-2.489853	-2.318848	-0.026087	-0.588406	0.382609	-10.48406	6.4058	3.359419	-0.472464	-4.191299	-10.51885	-7.733322	6.347839	-101.8667	5.530435	80.27246	62.47536	-43.92754	63.68696	39.14203	-28.38261
NO2_5	-1.771011	0.426086	0.037674	0.86377	-0.084061	1.94783	-0.959412	-0.533333	-0.086956	-0.472464	0.8	-9.950729	5.800003	3.269566	-0.666668	1.394211	-0.208694	1.77681	8.744919	-107.6493	3.344928	60.6116	50.53043	-37.86377	44.63478	32.34783	-27.14783
NO2_6	-2.75943	0.843479	-2.72464	-0.831879	-1.243484	-1.385513	-2.930435	-1.713043	0.272464	-0.573913	0.188406	-7.617393	4.973915	2.191303	-1.655073	0.27536	-0.547836	-1.10434	6.6203	-99.04639	9.031884	78.82899	62.22609	-51.07537	73.56232	43.56522	-41.11594
NO2_7	-5.617386	1.130436	-0.628998	0.515945	0.199997	-0.597107	-0.866669	-0.788406	0	-0.6	-0.408696	-3.591293	11.96812	7.086956	-2.855072	3.446381	3.266663	5.718842	5.889862	-68.29276	2.023188	63.57391	55.14493	-67.4	32.62609	31.75362	-47.93623
CH3NHNH2_1	1.342026	0.657967	1.446381	1.098541	0.228989	1.153625	-0.455078	0.808701	0.005797	0.35942	-0.034782	1.524643	-0.414497	-1.307251	0.779709	-1.281158	-1.930435	-0.901443	1.008698	0.081161	-0.055072	0.197101	-0.846378	-0.353622	-0.588406	-1.298553	-1.246368
CH3NHNH2_5	-0.513046	1.002899	-1.08696	0.113037	-0.162308	-1.023193	-0.649277	-0.023178	-0.034783	0.168116	0.188406	0.994202	-1.13913	-1.031883	0.014496	-0.284058	0.617401	2.144928	-0.228989	-0.098557	-0.327536	-1.089855	-2.185509	-0.240585	-0.686956	-1.962318	-2.321732
CH3NHNH2_2	0.263763	0.136238	0.385513	-0.53334	0.211609	-0.936234	-0.142029	-0.495651	-0.805797	0.252174	0.066667	0.979706	-0.391296	0.301445	3.591309	-0.710144	0.246384	-1.17392	-0.188416	0.014496	0.944929	0.002899	-0.385513	0.968109	-2.228981	-1.295647	1.918839
CH3NHNH2_3	0.342041	-0.223186	0.159409	-0.098557	0.023193	0.77681	-1.342026	-0.86377	0.005797	0.518841	0.515942	1.49855	-1.176811	-0.63768	-0.046375	-0.576813	-0.715942	0.10144	0.310135	-0.686966	-0.168116	-0.452173	-1.388405	-0.939117	-0.214493	-1.620293	-2.124634
CH3NHNH2_6	-1.388412	-0.826088	-1.907242	-0.591309	-0.411591	-1.113052	-0.828979	0.144928	-0.026087	0.185507	0.011594	0.947815	0.031883	0.750725	1.976807	-0.486954	0.028976	-0.124634	0.292755	-0.373917	0.368116	-0.597099	-1.475365	-0.423187	-1.57971	-2.1884	-3.544922
CH3NHNH2_4	0.805801	-0.197098	0.489853	-0.008698	-0.197098	1.205795	0.176819	-0.023193	0.081159	0.53913	0.817391	2.22319	-1.031876	-0.379715	-0.237686	0.182617	-0.533325	2.518845	0.518845	-0.313034	-0.043478	-0.121738	-0.524639	0.199997	-0.028986	-0.840576	-0.362312
CH3NHNH2_7	0.457962	0.118843	-1.127533	0.321732	-0.559418	0.507248	-0.197113	-0.689857	0	0.153624	0.281159	-0.1884	-1	-1.205795	0.484058	-1.820297	-1.034775	-0.553619	-0.455063	-0.365219	0.089855	-0.188404	-0.811592	-2.118843	0.205797	-1.081161	-1.324631

	R28	G28	B28	R29	G29	B29	R30	G30	B30	R31	G31	B31	R32	G32	B32	R33	G33	B33	R34	G34	B34	R35	G35	B35	R36	G36	B36
SO2_1	0.510132	-0.710144	-0.084061	0.634781	0.179703	-0.971024	-0.60289	0.191299	-0.489865	0.140858	0.233788	0.468515	20.29858	22.34493	-0.858654	3.604328	4.080429	1.597107	1.371017	-1.669571	-0.02029	21.41449	17.34493	-26.74783	18.10145	16.32174	-22.51595
SO2_2	-0.350723	-0.173912	-0.663757	0.217392	0.057968	-0.597092	-0.142029	0.49276	-0.063768	0.226087	-0.11884	-0.518829	17.96812	19.32174	-5.028992	0.915939	-0.576813	0.405792	0.828979	-1.44928	0.008696	20.58261	16.51014	-26.39421	16.55652	15.03768	-22.74203
SO2_3	-1.962311	-1.147827	-2.446381	-2.782608	-4.017395	-3.371017	-2.542038	-1.852173	-1.324638	-0.217391	-0.611594	-0.495667	18.32463	18.97681	-5.915939	-0.53334	0.800003	1.713043	-1.110138	-3.101456	0	14.88406	13.09275	-24.85797	9.855073	10.89565	-20.50725
SO2_4	0.89856	0.971016	0.455063	0.817398	0.373917	0.736237	-0.089859	0.234787	0.617391	0.344928	0.249275	0.559418	18.76232	20.53623	-5.515945	0.36232	0.220291	-0.011597	1.089859	-1.049271	-0.405797	20.72174	16.23188	-23.27246	17.13044	14.75942	-20.54202
SO2_5	-0.956528	-0.426086	-1.77681	-0.828979	-0.405807	-2.411591	-0.82608	-0.886955	0.286956	-0.139131	0.011594	0.342026	16.94782	18.24058	-4.47826	-1.368118	-0.58551	-0.371017	-1.101456	-3.968109	0.049275	19.44348	15.37101	-25.67535	14.85217	13.15653	-21.35073
SO2_6	0.240585	-0.318844	0.130432	0.310135	-0.292755	-0.750732	-0.391296	-0.356522	-0.005797	0.037681	0.089855	-0.27536	15.92754	16.29565	-3.82029	-0.405792	-1.194214	0.814484	0.295654	-2.394211	0.037681	6.881159	8.66087	-18.48116	4.663768	7.747826	-12.55942
SO2_7	0.492752	0.901451	0.907242	0.927536	1.25798	0.333328	-0.371017	0.953613	-0.136232	0.376812	0.231884	0.405792	21.59421	23.68406	-5.292755	1.515945	2.594208	1.394196	1.889862	0.359421	0.492754	19.78841	16.51884	-24.33623	18.46377	16.47247	-20.11594
HCN_1	-1.423187	-0.333336	-0.881165	1.301453	-1.13913	-3.191315	-0.933334	-0.165215	0	-0.185507	0.008696	-0.478256	39.46957	40.98261	-6.150723	-0.226089	0.017395	-0.298553	8.205795	-97.2058	0.991304	162.3449	116.8203	-75.06087	115.6087	79.85797	-79.11015
HCN_2	-0.252167	-0.22319	1.072464	1.115936	-2.431885	-5.426086	0.002899	0.124634	0	-0.455073	-0.527536	-0.084061	47.01739	48.85798	-5.434784	1.049271	-0.547836	0.133331	9.336227	-105.9159	5.724638	157.3884	116.7391	-57.44637	183.0783	99.87537	-89.68696
HCN_3	-0.237686	0.005798	0.127533	0.944916	-1.22319	-2.611603	1.492752	0.643478	0	-0.008696	0.095652	1.121735	47.99711	52.13913	-6.959423	2.565216	0.144928	0.286957	7.394196	-87.31305	1.22029	162.4986	119.3478	-64.06377	154.5971	87.45797	-77.89565
HCN_4	0.443474	0.15942	-1.034775	-0.336243	-0.263763	-3.60289	-0.956512	0.110146	0	-0.22029	-0.017391	0.460869	33.84058	33.7826	-4.52174	0.521744	-0.226074	-0.365204	7.292755	-84.16232	0.530435	160.5246	112.8493	-78.08406	153.6319	84.91016	-75.05218
HCN_5	0.434784	-0.06377	-0.666656	1.475357	0.594193	-2.379715	0.376801	0.217392	-0.063768	-0.153623	0.026087	-0.22319	45.6174	47.72754	-4.950726	0.573914	-0.043472	0.081161	8.095657	-73.2058	10.76522	165.9102	121.9681	-63.52754	158.8667	88.15653	-78.14203
HCN_6	-0.86087	-0.115944	-1.1884	0.805801	-0.017395	-2.962311	-0.113052	0.078255	0	-0.336232	-0.243478	0.994202	45.97681	49.86667	-5.144928	-0.576813	-0.113052	-1.565216	7.063766	-84.14494	2.133333	157.6841	110.258	-67.82898	147.3768	77.6	-56.91304
HCN_7	0.304352	0.310146	-0.078262	0.03479	-0.486954	-0.17392	-0.095657	0.142029	0	-0.034783	0.130435	0.524635	47.64349	54.95652	-5.394199	1.814499	2.194199	3.321732	7.918839	-74.46378	0.75942	173.9971	126.5362	-75.05218	160.2087	93.31305	-85.9884
HF_1	-2.243469	-0.231884	-1.289856	-0.634781	-3.304352	-4.226089	-1.788406	-0.092751	0	-0.315942	-0.069565	-0.400002	6.002899	6.878258	-0.344925	0.243484	-0.828979	-0.217392	5.959412	-115.4435	2.191304	32.85797	30.29276	-52.37972	24.42899	21.46956	-39.36232
HF_2	-0.478271	-0.417389	0.107254	-0.028992	-0.820282	-0.886963	0.101456	-0.194206	0	0.130435	0.182609	-0.107254	7.449272	7.524635	-0.278263	-1.907242	-2.269577	-2.898544	8.513046	-99.22318	8.785507	23.24638	24.61739	-45.72173	14.95362	16.69565	-31.91884
HF_3	1.217392	0.484058	1.388397	1.36232	1.568115	0.472473	0.814499	0.533333	0	0.176812	0.075362	1.782608	8.608696	7.327538	0.191303	4.779709	4.368118	5.394211	8.252182	-74.9884	4.64058	15.26087	16.50435	-34.93043	16.23768	17.77391	-28.92754
HF_4	-1.391304	0.255072	-0.68985	1.026093	-1.078262	-2.568115	-0.881149	1.028984	0	0.281159	0.286957	-0.681168	5.663765	4.704346	0.44058	2.336227	0.582611	0.634781	5.831894	-129.9275	9.736232	21.89275	22.56232	-37.61739	15.67246	18.89855	-30.89276
HF_5	-2.162323	0.365215	-0.037689	-0.182617	-2.721725	-5.96521	-0.997101	-0.486961	0	-0.153624	0.017391	-1.237686	5.536232	5.823189	-1.591305	0.469574	-0.211594	-0.205795	6.86377	-119.4754	9.194202	46.85507	39.86667	-49.67246	13.91884	15.65217	-26.27826
HF_6	-0.388412	0.350727	-1.084061	0.979706	-1.834778	-4.060867	-0.333328	0.440575	-0.084058	0.142029	0.202899	-1.150726	4.991302	5.759415	-0.18261	1.321732	-0.539139	1.147827	7.707245	-111.4638	8.64058	39.24058	32.62318	-45.98261	15.68116	16.25507	-26.22609
HF_7	-0.133331	0.721737	1.356522	0.944916	-0.571014	-3.510147	0.286957	0.344925	-0.014493	0.142029	0.081159	0.046387	4.840576	4.857971	-0.313042	0.631882	-0.040573	1.704346	8.31015	-100.4812	4.443478	24.53043	22.6116	-38.73043	13.16232	14.29565	-20.83768
HNO3_1	-2.376816	-0.118841	-1.194199	-1.278275	-1.17392	-2.046371	-2.597107	-0.014496	0	0.089855	0.156522	-0.484055	-3.944916	-7.118843	-10.51304	-0.918839	-2.110153	-3.330429	3.565216	-53.12463	0.002899	7.165216	6.991304	-15.42319	1.208696	1.805798	-9.333336
HNO3_2	-2.159424	0.785507	1.08696	1.286957	-1.866669	-5.686951	1.043472	1.828987	0	0.124638	0.046377	1.385506	3.440582	3.631886	0.846376	4.301437	4.095657	6.260864	6.278259	-62.06667	0.002899	11.2058	11.64928	-12.62029	2.626087	4.463768	-7.736229
HNO3_3	-1.652176	0.457972	0.110138	-0.657974	-1.023178	-3.321732	-1.040573	-0.599998	0	0.121739	-0.02029	-0.472466	1.950722	2.568115	0.489857	-0.837677	-0.933319	-0.423187	4.286957	-57.55363	0.002899	7.973913	9.008696	-15.03768	0.953623	2.991304	-9.028984
HNO3_4	-2.376816	-0.118841	-1.194199	-1.278275	-1.17392	-2.046371	-2.597107	-0.014496	0	0.089855	0.156522	-0.484055	-3.944916	-7.118843	-10.51304	-0.918839	-2.110153	-3.330429	3.565216	-53.12463	0.002899	7.165216	6.991304	-15.42319	1.208696	1.805798	-9.333336
HNO3_5	-0.62899	0.133333	-0.631882	1.313034	-1.023193	-1.457962	-0.472458	0.62899	-0.04058	-0.156522	0.150725	1.460869	2.13044	1.710144	-0.707247	-0.150711	0.228989	0.652176	4.113037	-50.46087	0.014493	2.672463	3.686957	-8.336231	1.443478	2.797102	-6.559422
HNO3_6	0.072464	0.107246	0.834778	1.371017	0.53334	1.420288	1.185501	0.521744	0	0.150725	0.107246	0.785507	3.823189	2.791306	-1.072464	1.733337	-0.284058	1.281158	3.968109	-46.58261	0.226087	3.73913	5.168116	-10.47826	1.327536	2.489857	-5.875362
HNO3_7	-0.86087	0.486956	-0.628983	-0.069565	-0.733337	-1.289856	-1.05217	-0.333336	0	-0.023188	-0.014493	0.794205	2.617386	2.289856	-1.486956	0.933334	0.678268	-0.026093	3.286957	-41.15072	0	3.055072	3.197102	-6.715942	0.24058	0.362318	-3.011593
Hydrazine_1	-0.72464	0.4058	-0.228989	-0.628998	-0.681168	0.759415	-0.315948	1.005798	0	-0.165217	0.150725	-0.3797	-0.913048	-1.034782	0.191305	-0.263779	1.260864	1.307251	-1.055084	-2.127533	-0.005797	-1.530434	-2.768116	-3.194214	-1.362319	-4.385506	-5.026093
Hydrazine_2	-0.373917	0.057976	0.136246	-0.634781	0.037689	0.779724	-0.295654	0.50145	0.034783	-0.823189	-0.15942	0.976822	-1.834778	-2.162319	0.571014	0.25798	0.982605	-0.89566	-1.298553	-0.823196	0.585507	-1.71594	-4.97681	-7.31884	-0.991304	-7.055077	-8.298553
Hydrazine_3	-0.234787	-0.069565	0.307251	-0.657974	0.50145	0.733322	-0.750717	-0.472466	0	0.084058	0.063768	0.756516	-1.026093	-0.492756	0.269565	1.234787	-0.063766	-0.162323	-1.298538	-1.350723	0.02029	-1.23768	-4.040581	-10.18261	-0.75942	-5.72464	-8.959419
Hydrazine_4	-0.388412	0.29855	0.686966	-0.808701	0.127533	-0.182602	-0.510147	0.826088	0	-0.15942	0.150725	0.571014	-1.669563	-1.54493	0.223188	0.771011	0.049271	-0.704361	-1.898544	-2.582611	1.423188	-1.197102	-4.263767	-6.539131	-2.078261	-5.779709	-7.4058
Hydrazine_5	-0.484055	-0.513046	-0.379715	0.904343	0.779724	-0.924637	0.857971	-0.281158	0	0.408696	-0.107246	1.556519	-1.089851	-1.365219	0.802898	0.484055	1.205795	1.481155	-1.617401	-1.118851	0.266667	-0.223188	-4.014492	-9.846382	-0.286957	-6.518845	-7.463768
Hydrazine_6	0.052185	-0.168118	-1.875366	0.031876	-0.040573	0.802902	0.660873	0	0	0	0.089855	1.237671	-2.063766	-1.344929	0.142031	-0.736237	0.771027	0.217377	-1.889862	-2.86087	0.249275	-0.518841	-4.171013	-6.826088	-1.13913	-6.794205	-9.878258
Hydrazine_7	0.118851	-0.356522	0.556519	0.176804	-0.266678	-1.252182	-0.495651	-0.182617	0	0.22029	-0.084058	1.118835	-1.330437	-1.857971	0.052174	-0.849274	0.084061	1.695648	-1.855072	-3.460861	1.159421	-0.747826	-3.176811	-5.371017	-1.104349	-5.255074	-5.797096