

MI L-53\_Cr\_-NP53. 5MPa

data\_MIL-53(Cr)-NP53. 5MPa

\_audit\_creation\_date 2011-10-20  
\_audit\_creation\_method 'Materials Studi o'  
\_symmetry\_space\_group\_name\_H-M 'P1'  
\_symmetry\_Int\_Tables\_number 1  
\_symmetry\_cell\_setting triclinic

loop\_

\_symmetry\_equiv\_pos\_as\_xyz

x, y, z

\_cell\_length\_a 19.2730  
\_cell\_length\_b 7.9140  
\_cell\_length\_c 6.5830  
\_cell\_angle\_alpha 90.0000  
\_cell\_angle\_beta 95.0000  
\_cell\_angle\_gamma 90.0000

loop\_

\_atom\_site\_label

\_atom\_site\_type\_symbol

\_atom\_site\_fract\_x

\_atom\_site\_fract\_y

\_atom\_site\_fract\_z

\_atom\_site\_U\_iso\_or\_equiv

\_atom\_site\_adp\_type

\_atom\_site\_occupancy

O1	O	0.91658	0.37828	0.84551	0.04000	Ui so	1.00
O2	O	0.06458	0.67099	0.44100	0.04000	Ui so	1.00
C3	C	0.79817	0.21753	0.38226	0.04000	Ui so	1.00
C4	C	0.22677	0.70150	0.29072	0.04000	Ui so	1.00
C5	C	0.82192	0.27388	0.58963	0.04000	Ui so	1.00
C6	C	0.89230	0.35218	0.65945	0.04000	Ui so	1.00
H7	H	0.83349	0.18320	0.29927	0.04000	Ui so	1.00
H8	H	0.20994	0.67552	0.13403	0.04000	Ui so	1.00
O9	O	0.41658	0.87828	0.84551	0.04000	Ui so	1.00
O10	O	0.56458	0.17099	0.44100	0.04000	Ui so	1.00
C11	C	0.29817	0.71753	0.38226	0.04000	Ui so	1.00
C12	C	0.72677	0.20150	0.29072	0.04000	Ui so	1.00
C13	C	0.32192	0.77388	0.58963	0.04000	Ui so	1.00
C14	C	0.39230	0.85218	0.65945	0.04000	Ui so	1.00
H15	H	0.33349	0.68320	0.29927	0.04000	Ui so	1.00
H16	H	0.70994	0.17552	0.13403	0.04000	Ui so	1.00
O17	O	0.08342	0.37828	0.65449	0.04000	Ui so	1.00
O18	O	0.93542	0.67099	0.05900	0.04000	Ui so	1.00
C19	C	0.20183	0.21753	0.11774	0.04000	Ui so	1.00
C20	C	0.77323	0.70150	0.20928	0.04000	Ui so	1.00
C21	C	0.17808	0.27388	0.91037	0.04000	Ui so	1.00
C22	C	0.10770	0.35218	0.84055	0.04000	Ui so	1.00
H23	H	0.16651	0.18320	0.20073	0.04000	Ui so	1.00
H24	H	0.79006	0.67552	0.36597	0.04000	Ui so	1.00
O25	O	0.58342	0.87828	0.65449	0.04000	Ui so	1.00
O26	O	0.43542	0.17099	0.05900	0.04000	Ui so	1.00
C27	C	0.70183	0.71753	0.11774	0.04000	Ui so	1.00
C28	C	0.27323	0.20150	0.20928	0.04000	Ui so	1.00
C29	C	0.67808	0.77388	0.91037	0.04000	Ui so	1.00
C30	C	0.60770	0.85218	0.84055	0.04000	Ui so	1.00
H31	H	0.66651	0.68320	0.20073	0.04000	Ui so	1.00
H32	H	0.29006	0.17552	0.36597	0.04000	Ui so	1.00
O33	O	0.08342	0.62172	0.15449	0.04000	Ui so	1.00
O34	O	0.93542	0.32901	0.55900	0.04000	Ui so	1.00
C35	C	0.20183	0.78247	0.61774	0.04000	Ui so	1.00
C36	C	0.77323	0.29850	0.70928	0.04000	Ui so	1.00
C37	C	0.17808	0.72612	0.41037	0.04000	Ui so	1.00
C38	C	0.10770	0.64782	0.34055	0.04000	Ui so	1.00
H39	H	0.16651	0.81680	0.70073	0.04000	Ui so	1.00
H40	H	0.79006	0.32448	0.86597	0.04000	Ui so	1.00
O41	O	0.58342	0.12172	0.15449	0.04000	Ui so	1.00
O42	O	0.43542	0.82901	0.55900	0.04000	Ui so	1.00
C43	C	0.70183	0.28247	0.61774	0.04000	Ui so	1.00
C44	C	0.27323	0.79850	0.70928	0.04000	Ui so	1.00

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C45	C	0.67808	0.22612	0.41037	0.04000	Ui so	1.00
C46	C	0.60770	0.14782	0.34055	0.04000	Ui so	1.00
H47	H	0.66651	0.31680	0.70073	0.04000	Ui so	1.00
H48	H	0.29006	0.82448	0.86597	0.04000	Ui so	1.00
O49	O	0.91658	0.62172	0.34551	0.04000	Ui so	1.00
O50	O	0.06458	0.32901	0.94100	0.04000	Ui so	1.00
C51	C	0.79817	0.78247	0.88226	0.04000	Ui so	1.00
C52	C	0.22677	0.29850	0.79072	0.04000	Ui so	1.00
C53	C	0.82192	0.72612	0.08963	0.04000	Ui so	1.00
C54	C	0.89230	0.64782	0.15945	0.04000	Ui so	1.00
H55	H	0.83349	0.81680	0.79927	0.04000	Ui so	1.00
H56	H	0.20994	0.32448	0.63403	0.04000	Ui so	1.00
O57	O	0.41658	0.12172	0.34551	0.04000	Ui so	1.00
O58	O	0.56458	0.82901	0.94100	0.04000	Ui so	1.00
C59	C	0.29817	0.28247	0.88226	0.04000	Ui so	1.00
C60	C	0.72677	0.79850	0.79072	0.04000	Ui so	1.00
C61	C	0.32192	0.22612	0.08963	0.04000	Ui so	1.00
C62	C	0.39230	0.14782	0.15945	0.04000	Ui so	1.00
H63	H	0.33349	0.31680	0.79927	0.04000	Ui so	1.00
H64	H	0.70994	0.82448	0.63403	0.04000	Ui so	1.00
Cr65	Cr	-0.00000	0.50000	1.00000	0.04000	Ui so	1.00
Cr66	Cr	0.50000	1.00000	1.00000	0.04000	Ui so	1.00
Cr67	Cr	-0.00000	0.50000	0.50000	0.04000	Ui so	1.00
Cr68	Cr	0.50000	1.00000	0.50000	0.04000	Ui so	1.00
O69	O	0.00000	0.64306	0.75000	0.04000	Ui so	1.00
H70	H	0.00000	0.75023	0.75000	0.04000	Ui so	1.00
O71	O	0.50000	0.14306	0.75000	0.04000	Ui so	1.00
H72	H	0.50000	0.25023	0.75000	0.04000	Ui so	1.00
O73	O	0.00000	0.35694	0.25000	0.04000	Ui so	1.00
H74	H	0.00000	0.24977	0.25000	0.04000	Ui so	1.00
O75	O	0.50000	0.85694	0.25000	0.04000	Ui so	1.00
H76	H	0.50000	0.74977	0.25000	0.04000	Ui so	1.00

loop\_

\_geom\_bond\_atom\_site\_label\_1

\_geom\_bond\_atom\_site\_label\_2

\_geom\_bond\_distance

\_geom\_bond\_site\_symmetry\_2

\_ccdc\_geom\_bond\_type

01	C6	1.289	.	S
01	Cr65	2.064	1_655	S
02	Cr67	1.901	.	S
02	C38	1.121	.	S
C3	C5	1.471	.	S
C3	H7	0.949	.	S
C3	C12	1.459	.	S
C4	C11	1.459	.	S
C4	C37	1.291	.	S
C4	H8	1.074	.	S
C5	C36	1.291	.	S
C5	C6	1.525	.	S
C6	O34	1.121	.	S
O9	Cr66	2.064	.	S
O9	C14	1.289	.	S
O10	C46	1.121	.	S
O10	Cr68	1.901	1_545	S
C11	C13	1.471	.	S
C11	H15	0.949	.	S
C12	C45	1.291	.	S
C12	H16	1.074	.	S
C13	C44	1.291	.	S
C13	C14	1.525	.	S
C14	O42	1.121	.	S
O17	Cr67	2.064	.	S
O17	C22	1.289	.	S
O18	C54	1.121	.	S
O18	Cr65	1.901	1_654	S
C19	H23	0.949	.	S
C19	C28	1.459	.	S

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C19	C21	1.471	1_554	S
C20	C27	1.459	.	S
C20	C53	1.291	.	S
C20	H24	1.074	.	S
C21	C52	1.291	.	S
C21	C22	1.525	.	S
C21	C19	1.471	1_556	S
C22	O50	1.121	.	S
O25	Cr68	2.064	.	S
O25	C30	1.289	.	S
O26	C62	1.121	.	S
O26	Cr66	1.901	1_544	S
C27	H31	0.949	.	S
C27	C29	1.471	1_554	S
C28	C61	1.291	.	S
C28	H32	1.074	.	S
C29	C60	1.291	.	S
C29	C30	1.525	.	S
C29	C27	1.471	1_556	S
C30	O58	1.121	.	S
O33	C38	1.289	.	S
O33	Cr65	2.064	1_554	S
O34	Cr67	1.901	1_655	S
C35	C37	1.471	.	S
C35	H39	0.949	.	S
C35	C44	1.459	.	S
C36	C43	1.459	.	S
C36	H40	1.074	.	S
C37	C38	1.525	.	S
O41	C46	1.289	.	S
O41	Cr66	2.064	1_544	S
O42	Cr68	1.901	.	S
C43	C45	1.471	.	S
C43	H47	0.949	.	S
C44	H48	1.074	.	S
C45	C46	1.525	.	S
O49	C54	1.289	.	S
O49	Cr67	2.064	1_655	S
O50	Cr65	1.901	.	S
C51	H55	0.949	.	S
C51	C60	1.459	.	S
C51	C53	1.471	1_556	S
C52	C59	1.459	.	S
C52	H56	1.074	.	S
C53	C54	1.525	.	S
C53	C51	1.471	1_554	S
O57	C62	1.289	.	S
O57	Cr68	2.064	1_545	S
O58	Cr66	1.901	.	S
C59	H63	0.949	.	S
C59	C61	1.471	1_556	S
C60	H64	1.074	.	S
C61	C62	1.525	.	S
C61	C59	1.471	1_554	S
Cr65	O69	1.998	.	S
Cr65	O1	2.064	1_455	S
Cr65	O18	1.901	1_456	S
Cr65	O33	2.064	1_556	S
Cr65	O73	1.998	1_556	S
Cr66	O26	1.901	1_566	S
Cr66	O41	2.064	1_566	S
Cr66	O71	1.998	1_565	S
Cr66	O75	1.998	1_556	S
Cr67	O69	1.998	.	S
Cr67	O73	1.998	.	S
Cr67	O34	1.901	1_455	S
Cr67	O49	2.064	1_455	S
Cr68	O75	1.998	.	S

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Cr68	010	1.901	1_565	S
Cr68	057	2.064	1_565	S
Cr68	071	1.998	1_565	S
069	H70	0.848	.	S
071	H72	0.848	.	S
071	Cr66	1.998	1_545	S
071	Cr68	1.998	1_545	S
073	H74	0.848	.	S
073	Cr65	1.998	1_554	S
075	H76	0.848	.	S
075	Cr66	1.998	1_554	S