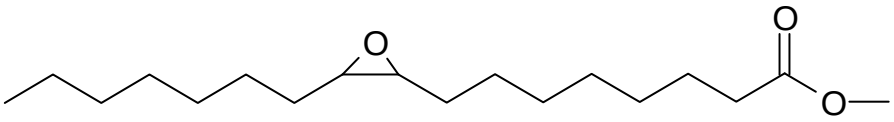
Technical data sheet Synthesized: 17/11/09

# L09-0191 : Epoxidized Oleic Methyl Ester (EOME)

OLEIC SUNFLOWER METHYLESTERS DERIVATE




| ***CHARACTERISTICS*** | ***UNITS*** | ***VALUES*** | ***METHODS*** |
|---|---|---|---|
| Acidity value | mgKOH/g | 0.84 (+/- 0,09) | ISO 660:1996 |
| Oxirane value | % $O_2$ | 4.83 (+/- 0,08) | AOCS Cd 9-57 |
| Water content | % | 0.28 | |
| Purity (GC) | % | 82.4 | |

***PHYSICAL PROPERTIES :***

| | |
|---|---|
| Appearance at 20°C | colorless oily liquid |
| Behavior in water at 20°C | insoluble |
| Soluble at 25°C in | most organic solvents |

***DELIVERED QUANTITY*** :

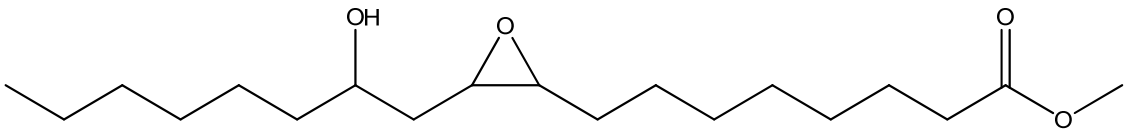
20g

***MAIN APPLICATIONS :***

Analysis in supercritical $CO_2$

Technical data sheet Synthesized: 21/01/2010

# L10-0009: Epoxidized Ricinoleic Methyl Ester (ERME)




| ***CHARACTERISTICS*** | ***UNITS*** | ***VALUES*** |
|---|---|---|
| Water content | % | 0.42 |
| Acidity value | mgKOH/g | 1.19 |
| Oxirane value | % | 3.57 |
| Purity GC | % | 62.4 |

***PHYSICAL PROPERTIES***

Orange colored oily liquid

***DELIVERED QUANTITY*** :

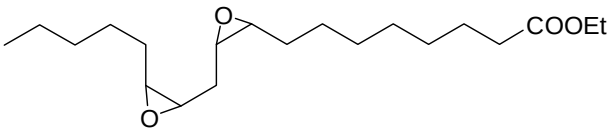
20g

***MAIN APPLICATIONS***

Analysis in supercritical $CO_2$

Technical data sheet

# L090163: Epoxidized Linoleic Ethyl Ester (ELEE)




***CHARACTERISTICS***

| | | |
|---|---|---|
| | L09-0163 | |
| **Product** | ELEE (white cream) | |
| Acidity value (mgKOH/g) | 0,98 | |
| Iodine Index(g $I_2$/100g) | 4 | |
| Oxirane value (%) | 6,05 | |
| GC Analysis | Product | % |
| | diepoxide | **57** |
| | monoepoxide | 15 |
| | Non epoxidized Ester | 15,8 |
| | Non determined | 12,2 |

***DELIVERED QUANTITY*** :

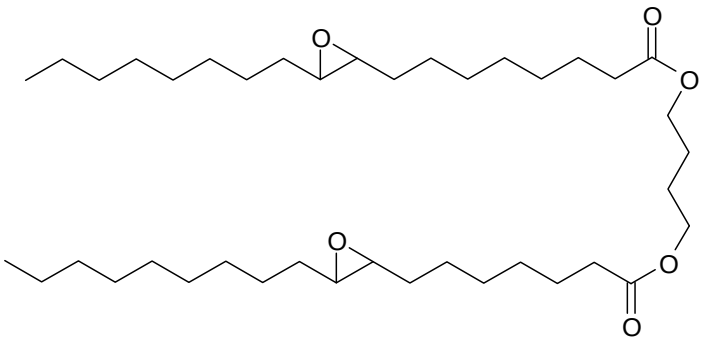
20g

***MAIN APPLICATIONS :*** Analysis in supercritical $CO_2$

Electronic Supplementary Material (ESI) for Polymer Chemistry


Technical data sheet

# L090180: Epoxidized Oleic Butyl diEster (EOBudE)



***CHARACTERISTICS***

| | L09-0180 | |
|---|---|---|
| **Product** | EOBudE (white cream) | |
| Acidity value (mgKOH/g) | 9,26 | |
| Iodine Index (g $I_2$/100g) | 4 | |
| Oxirane value (%) | 4,16 | |
| Analyse GC | Product | % |
| | diepoxide | **64,2** |
| | monoepoxide | 16,3 |
| | Non epoxidized Ester | 14,3 |
| | Non determined | 5,2 |

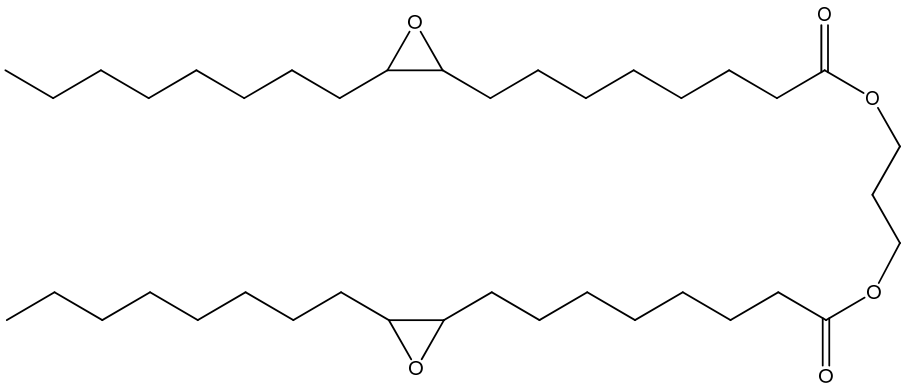
***DELIVERED QUANTITY*** :

20g

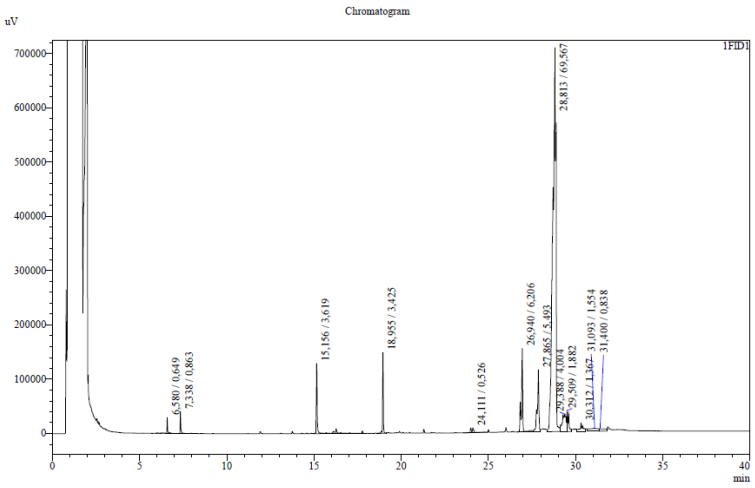
***MAIN APPLICATIONS :*** Analysis in supercritical $CO_2$

Technical data sheet Synthesized: 18/05/11

# ML139: Epoxidized Oleic Propyl diEster (EOPrdE)



| ***CHARACTERISTICS*** | ***UNITS*** | ***VALUES*** | ***METHODS*** |
|---|---|---|---|
| Acidity value | mgKOH/g | nd | ISO 660:1996 |
| Oxirane value | % $O_2$ | nd | AOCS Cd 9-57 |
| Water content | % | nd | |
| Purity (GC) | % | 69.5 | |




***PHYSICAL PROPERTIES :***

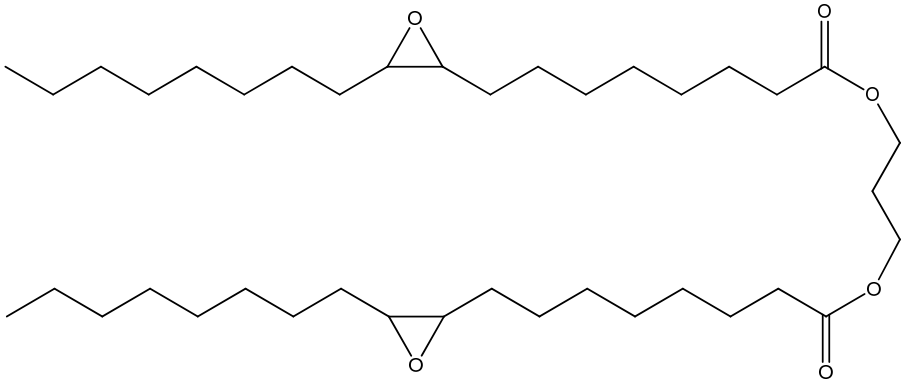
| | |
|---|---|
| Appearance at 20°C | white cream |
| Behavior in water at 20°C | nd |
| Soluble at 25°C in | most organic solvents |

***DELIVERED QUANTITY*** :
15g

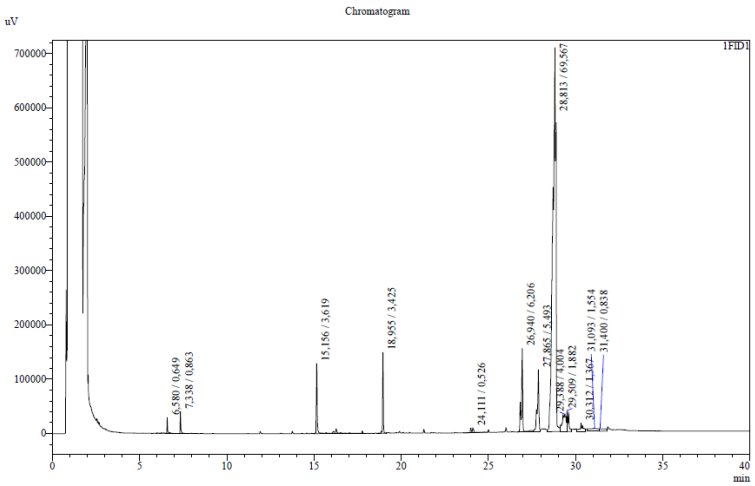
***MAIN APPLICATIONS :***
Analysis in supercritical $CO_2$

Technical data sheet Synthesized: 18/05/11

# ML139 : Epoxidized Oleic Propyl diEster(EOPrdE)



| ***CHARACTERISTICS*** | ***UNITS*** | ***VALUES*** | ***METHODS*** |
|---|---|---|---|
| Acidity value | mgKOH/g | nd | ISO 660:1996 |
| Oxirane value | % $O_2$ | nd | AOCS Cd 9-57 |
| Water content | % | nd | |
| Purity (GC) | % | 69.5 | |




***PHYSICAL PROPERTIES :***

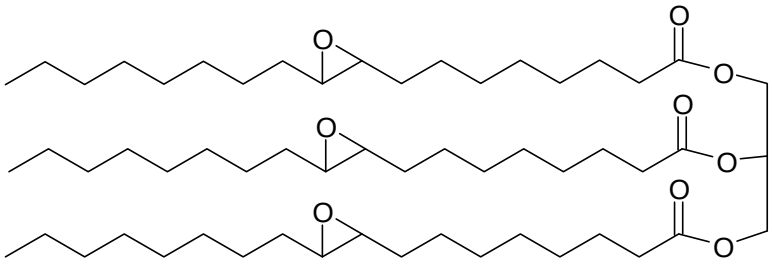
| | |
|---|---|
| Appearance at 20°C | white cream |
| Behavior in water at 20°C | nd |
| Soluble at 25°C in | most organic solvents |

***DELIVERED QUANTITY*** :
15g

***MAIN APPLICATIONS :***
Analysis in supercritical $CO_2$

Technical data sheet

# L090182: Epoxidized Very High Oleic Sunflower Oil (EVHOSO)



***CHARACTERISTICS***

| | L09-0182 |
|---|---|
| **Product** | EVHOSO (White solid) |
| Iodine Index (g I2/100g) | 90 |
| Acidity value (mgKOH/g) | 1,25 |
| Oxirane value (%) | 4,88 |

***DELIVERED QUANTITY*** :

20g

***MAIN APPLICATIONS :*** Analysis in supercritical $CO_2$

Electronic Supplementary Material (ESI) for Polymer Chemistry


# Supporting Information for :

# Solubility in CO2 and Swelling studies by in situ IR spectroscopy of Vegetable-Based Epoxidized Oils as Polyurethane precursors

Tables of values for each VBEO in the VBEO-rich phase and in the $CO_2$-rich phase

**Comment:**
**ρ (g.cm$^{-3}$)** represents the $CO_2$ density calculated from NIST thermodynamics data for pure $CO_2$;
**[$CO_2$] (mol.L$^{-1}$)** represents the $CO_2$ concentration calculated from the experimental FTIR spectra in the considered phase;
**[VBEO] (mol.L$^{-1}$)** represents the VBEO concentration calculated from the experimental FTIR spectra in the considered phase;
**$X_{CO_2}$** represents the molar fraction of $CO_2$ calculated from the $CO_2$ and VBEO molar concentrations.

## 1°) EOME

### EOME-rich phase :

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [EOME] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.48503 | 102.84 | 7.87 | 1.42 | 0.85 |
| **100** | 18 | 0.42481 | 93.25 | 6.99 | 1.49 | 0.82 |
| **100** | 16 | 0.36369 | 65.32 | 5.92 | 1.74 | 0.77 |
| **100** | 14 | 0.3013 | 53.77 | 5.22 | 1.87 | 0.74 |
| **100** | 12 | 0.24207 | 38.84 | 4.43 | 2.07 | 0.68 |
| **100** | 10 | 0.18856 | 27.11 | 3.46 | 2.26 | 0.60 |
| **100** | 8 | 0.14127 | 18.68 | 2.78 | 2.42 | 0.53 |
| **100** | 6 | 0.099632 | 15.79 | 2.36 | 2.48 | 0.49 |
| **100** | 4 | 0.062749 | 10.00 | 1.57 | 2.62 | 0.37 |
| **100** | 2 | 0.029774 | 4.38 | 0.99 | 2.76 | 0.26 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 2.88 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 137.80 | 9.93 | 1.28 | 0.89 |
| **70** | 18 | 0.61224 | 135.94 | 9.44 | 1.29 | 0.88 |
| **70** | 16 | 0.54775 | 127.07 | 9.31 | 1.34 | 0.87 |
| **70** | 14 | 0.45662 | 106.85 | 8.45 | 1.47 | 0.85 |
| **70** | 12 | 0.34585 | 78.70 | 7.35 | 1.70 | 0.81 |
| **70** | 10 | 0.24777 | 52.53 | 5.85 | 1.99 | 0.75 |
| **70** | 9 | 0.20804 | 47.32 | 5.38 | 2.06 | 0.72 |
| **70** | 8 | 0.17362 | 39.82 | 5.02 | 2.17 | 0.70 |
| **70** | 6 | 0.11681 | 27.43 | 3.79 | 2.38 | 0.61 |
| **70** | 5 | 0.092865 | 19.84 | 3.11 | 2.54 | 0.55 |
| **70** | 4 | 0.07116 | 15.27 | 2.48 | 2.64 | 0.49 |
| **70** | 2 | 0.032973 | 3.78 | 1.23 | 2.93 | 0.30 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 3.04 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 154.84 | 12.49 | 1.25 | 0.91 |
| **40** | 15 | 0.78023 | 150.80 | 12.07 | 1.27 | 0.90 |
| **40** | 12.8 | 0.73847 | 152.81 | 12.00 | 1.26 | 0.91 |
| **40** | 10 | 0.62861 | 152.81 | 12.01 | 1.26 | 0.91 |
| **40** | 9 | 0.4855 | 110.67 | 10.43 | 1.51 | 0.87 |
| **40** | 8 | 0.2779 | 75.56 | 9.06 | 1.81 | 0.83 |
| **40** | 7 | 0.19802 | 49.06 | 7.13 | 2.13 | 0.77 |
| **40** | 6 | 0.14926 | 43.64 | 6.33 | 2.21 | 0.74 |
| **40** | 5.5 | 0.1337 | 37.39 | 5.61 | 2.31 | 0.71 |
| **40** | 4 | 0.083758 | 23.44 | 3.96 | 2.58 | 0.61 |
| **40** | 2 | 0.037127 | 5.34 | 2.02 | 3.02 | 0.40 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 3.18 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [EOME] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 10.6687 | 0.0217 | 0.9980 |
| **100** | 18 | 0.42481 | 9.2247 | 0.0217 | 0.9976 |
| **100** | 15 | 0.33235 | 6.8180 | 0.0039 | 0.9994 |
| **100** | 12 | 0.24207 | 4.9783 | 0.0011 | 0.9998 |
| **100** | 10 | 0.18856 | 3.5277 | 0.0003 | 0.9999 |
| **100** | 8 | 0.14127 | 2.6441 | 0.0001 | 1.0000 |
| **100** | 5 | 0.080651 | 1.3781 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.5407 | 0.0000 | 1.0000 |
| **100** | 0.1 | 0.0014218 | 0.0000 | 0.0000 | |
| | | | | | |
| **70** | 20 | 0.65905 | 17.1010 | 0.0148 | 0.9991 |
| **70** | 15 | 0.50588 | 12.0635 | 0.0035 | 0.9997 |
| **70** | 12 | 0.34585 | 7.4994 | 0.0022 | 0.9997 |
| **70** | 10 | 0.24777 | 4.5072 | 0.0003 | 0.9999 |
| **70** | 8 | 0.17362 | 3.1816 | 0.0001 | 1.0000 |
| **70** | 5 | 0.032963 | 1.7234 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.5492 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | 0.0000 | 0.0000 | |
| | | | | | |
| **40** | 20 | 0.83981 | 17.0675 | 0.3345 | 0.9808 |
| **40** | 18 | 0.83009 | 16.9403 | 0.3366 | 0.9805 |
| **40** | 15.5 | 0.78023 | 16.0784 | 0.3267 | 0.9801 |
| **40** | 14 | 0.76327 | 15.7535 | 0.3236 | 0.9799 |
| **40** | 12 | 0.71776 | 16.0926 | 0.0123 | 0.9992 |
| **40** | 11 | 0.68352 | 15.0612 | 0.0062 | 0.9996 |
| **40** | 10 | 0.62861 | 13.8602 | 0.0060 | 0.9996 |
| **40** | 8 | 0.2779 | 6.0311 | 0.0005 | 0.9999 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

## 2°) ERME

### ERMEE-rich phase

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [ERME] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 29 | 0.64915 | 66.84 | 7.92 | 1.66 | 0.83 |
| **100** | 20 | 0.48053 | 52.33 | 6.52 | 1.82 | 0.80 |
| **100** | 18 | 0.42481 | 42.42 | 5.70 | 1.94 | 0.78 |
| **100** | 16 | 0.36369 | 36.86 | 5.04 | 2.02 | 0.75 |
| **100** | 15 | 0.33235 | 32.71 | 4.64 | 2.09 | 0.74 |
| **100** | 14 | 0.3013 | 28.81 | 4.29 | 2.15 | 0.73 |
| **100** | 12 | 0.24207 | 24.24 | 3.60 | 2.23 | 0.68 |
| **100** | 10 | 0.18856 | 23.37 | 2.86 | 2.25 | 0.64 |
| **100** | 9.5 | 0.16416 | 18.37 | 2.41 | 2.34 | 0.60 |
| **100** | 8 | 0.14127 | 17.57 | 1.92 | 2.36 | 0.56 |
| **100** | 6 | 0.099632 | 10.87 | 1.32 | 2.50 | 0.48 |
| **100** | 5 | 0.080651 | 9.49 | 0.64 | 2.53 | 0.40 |
| **100** | 2 | 0.029774 | 6.82 | 0.07 | 2.59 | 0.03 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 2.77 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 102.13 | 9.75 | 1.61 | 0.86 |
| **70** | 18 | 0.61224 | 92.68 | 9.13 | 1.69 | 0.85 |
| **70** | 16 | 0.54775 | 84.08 | 8.69 | 1.77 | 0.84 |
| **70** | 15 | 0.50588 | 79.28 | 8.28 | 1.82 | 0.83 |
| **70** | 14 | 0.45662 | 71.81 | 7.86 | 1.90 | 0.80 |
| **70** | 12 | 0.34585 | 56.19 | 6.82 | 2.09 | 0.77 |
| **70** | 10 | 0.24777 | 53.86 | 5.78 | 2.12 | 0.73 |
| **70** | 9 | 0.20804 | 49.40 | 5.00 | 2.18 | 0.69 |
| **70** | 8 | 0.17362 | 44.17 | 4.68 | 2.26 | 0.67 |
| **70** | 7 | 0.1435 | 30.49 | 3.58 | 2.50 | 0.59 |
| **70** | 6 | 0.11681 | 33.88 | 2.94 | 2.44 | 0.55 |
| **70** | 4 | 0.07116 | 21.99 | 1.46 | 2.67 | 0.38 |
| **70** | 2 | 0.032963 | 13.28 | 0.21 | 2.88 | 0.19 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 3.26 | |
| | | | | | | |
| **40** | 30 | 0.90989 | 190.55 | 16.65 | 1.09 | 0.94 |
| **40** | 20 | 0.83981 | 133.11 | 13.33 | 1.36 | 0.91 |
| **40** | 18 | 0.83009 | 115.57 | 12.56 | 1.47 | 0.90 |
| **40** | 16 | 0.7949 | 113.27 | 12.21 | 1.49 | 0.89 |
| **40** | 15 | 0.78023 | 108.83 | 11.63 | 1.52 | 0.88 |
| **40** | 14 | 0.76327 | 111.03 | 10.89 | 1.50 | 0.88 |
| **40** | 12 | 0.71776 | 89.13 | 10.17 | 1.68 | 0.86 |
| **40** | 10 | 0.62861 | 80.61 | 9.15 | 1.76 | 0.84 |
| **40** | 9 | 0.4855 | 79.00 | 8.39 | 1.77 | 0.83 |
| **40** | 8 | 0.2779 | 69.90 | 7.22 | 1.87 | 0.79 |
| **40** | 6 | 0.14926 | 35.46 | 4.30 | 2.34 | 0.65 |
| **40** | 5 | 0.11305 | 31.03 | 2.65 | 2.42 | 0.52 |
| **40** | 4 | 0.083758 | 29.34 | 1.59 | 2.45 | 0.39 |
| **40** | 2 | 0.037127 | 10.15 | 0.09 | 2.88 | 0.03 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 3.16 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [ERME] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 10.4916 | 0.0084 | 0.9992 |
| **100** | 18 | 0.42481 | 8.5031 | 0.0049 | 0.9994 |
| **100** | 15 | 0.33235 | 6.2306 | 0.0012 | 0.9998 |
| **100** | 12 | 0.24207 | 4.0906 | 0.0002 | 0.9999 |
| **100** | 10 | 0.18856 | 3.2195 | 0.0001 | 1.0000 |
| **100** | 8 | 0.14127 | 1.9885 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 1.0605 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.3788 | 0.0000 | 1.0000 |
| **100** | 0.1 | 0.0014218 | | | |
| | | | | | |
| **70** | 20 | 0.65905 | 16.6086 | 0.0175 | 0.9989 |
| **70** | 18 | 0.61224 | 14.4497 | 0.0081 | 0.9994 |
| **70** | 15 | 0.50588 | 11.3817 | 0.0046 | 0.9996 |
| **70** | 12 | 0.34585 | 7.1775 | 0.0005 | 0.9999 |
| **70** | 10 | 0.24777 | 4.7534 | 0.0002 | 1.0000 |
| **70** | 8 | 0.17362 | 3.0111 | 0.0001 | 1.0000 |
| **70** | 5 | 0.092865 | 1.3825 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.6060 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | | | |
| | | | | | |
| **40** | 30 | 0.90989 | 28.1039 | 0.0911 | 0.9967 |
| **40** | 20 | 0.83981 | 25.0928 | 0.0918 | 0.9964 |
| **40** | 18 | 0.83009 | 23.9755 | 0.0915 | 0.9962 |
| **40** | 15 | 0.78023 | 22.8013 | 0.0564 | 0.9975 |
| **40** | 12 | 0.71776 | 20.6424 | 0.0092 | 0.9996 |
| **40** | 10 | 0.62861 | 17.4229 | 0.0031 | 0.9997 |
| **40** | 8 | 0.2779 | 5.3973 | 0.0000 | 1.0000 |
| **40** | 6 | 0.14926 | 2.3104 | 0.0000 | 1.0000 |
| **40** | 2 | 0.037127 | 0.6439 | 0.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

### 3°) ELEE

### ELEEE-rich phase

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [ELEE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.65905 | 57.49 | 6.36 | 1.77 | 0.78 |
| **100** | 18 | 0.61224 | 59.77 | 6.23 | 1.74 | 0.78 |
| **100** | 16 | 0.54775 | 52.06 | 5.85 | 1.83 | 0.76 |
| **100** | 15 | 0.50588 | 49.99 | 5.64 | 1.85 | 0.75 |
| **100** | 14 | 0.45662 | 46.02 | 5.17 | 1.90 | 0.73 |
| **100** | 12 | 0.34585 | 43.17 | 4.98 | 1.94 | 0.72 |
| **100** | 11 | 0.24777 | 38.67 | 4.58 | 2.00 | 0.70 |
| **100** | 10 | 0.20804 | 33.63 | 4.09 | 2.08 | 0.66 |
| **100** | 9 | 0.17362 | 27.45 | 3.33 | 2.18 | 0.60 |
| **100** | 7 | 0.1435 | 21.14 | 2.63 | 2.29 | 0.53 |
| **100** | 6 | 0.11681 | 17.91 | 1.97 | 2.36 | 0.46 |
| **100** | 5 | 0.092865 | 14.83 | 1.50 | 2.42 | 0.38 |
| **100** | 4 | 0.07116 | 12.49 | 1.00 | 2.47 | 0.29 |
| **100** | 2 | 0.032963 | 8.61 | 0.25 | 2.56 | 0.09 |
| **100** | 1 | 0.015927 | 2.55 | 0.00 | 2.71 | |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 2.77 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 88.02 | 9.26 | 1.46 | 0.86 |
| **70** | 18 | 0.61224 | 81.75 | 8.83 | 1.51 | 0.85 |
| **70** | 16 | 0.54775 | 84.83 | 8.65 | 1.49 | 0.85 |
| **70** | 15 | 0.50588 | 74.48 | 8.43 | 1.58 | 0.84 |
| **70** | 14 | 0.45662 | 70.39 | 7.50 | 1.61 | 0.82 |
| **70** | 12 | 0.34585 | 55.79 | 6.63 | 1.77 | 0.79 |
| **70** | 10 | 0.24777 | 52.52 | 6.31 | 1.80 | 0.78 |
| **70** | 9 | 0.20804 | 48.37 | 5.72 | 1.85 | 0.76 |
| **70** | 8 | 0.17362 | 38.92 | 5.32 | 1.98 | 0.73 |
| **70** | 7 | 0.1435 | 36.31 | 4.26 | 2.02 | 0.68 |
| **70** | 6 | 0.11681 | 24.63 | 3.12 | 2.21 | 0.59 |
| **70** | 5 | 0.092865 | 25.35 | 2.78 | 2.19 | 0.56 |
| **70** | 4 | 0.07116 | 17.26 | 1.72 | 2.35 | 0.42 |
| **70** | 2.5 | 0.032963 | 11.28 | 1.14 | 2.47 | 0.31 |
| **70** | 1.2 | 0.015927 | 4.86 | 0.00 | 2.62 | |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 2.75 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 300.58 | 19.54 | 0.74 | 0.96 |
| **40** | 18 | 0.83009 | 329.72 | 19.28 | 0.69 | 0.97 |
| **40** | 15 | 0.78023 | 293.91 | 18.67 | 0.76 | 0.96 |
| **40** | 14 | 0.76327 | 263.61 | 17.99 | 0.82 | 0.96 |
| **40** | 12 | 0.71776 | 191.78 | 16.27 | 1.02 | 0.94 |
| **40** | 10 | 0.62861 | 151.43 | 14.51 | 1.19 | 0.92 |
| **40** | 9 | 0.4855 | 120.88 | 13.28 | 1.35 | 0.91 |
| **40** | 8 | 0.2779 | 100.29 | 12.16 | 1.49 | 0.89 |
| **40** | 6 | 0.14926 | 54.47 | 9.28 | 1.93 | 0.83 |
| **40** | 5 | 0.11305 | 36.62 | 7.04 | 2.18 | 0.76 |
| **40** | 4 | 0.083758 | 24.39 | 5.40 | 2.40 | 0.69 |
| **40** | 2 | 0.037127 | 9.42 | 2.18 | 2.72 | 0.44 |
| **40** | 1 | 0.017669 | 1.00 | 0.00 | 2.95 | |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 2.98 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [ELEE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 9.6962 | 0.0150 | 0.9985 |
| **100** | 18 | 0.42481 | 8.5789 | 0.0080 | 0.9991 |
| **100** | 15 | 0.33235 | 6.3442 | 0.0020 | 0.9997 |
| **100** | 12 | 0.24207 | 3.8444 | 0.0004 | 0.9999 |
| **100** | 10 | 0.18856 | 2.9164 | 0.0001 | 1.0000 |
| **100** | 8 | 0.14127 | 2.0074 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 1.0037 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.3219 | 0.0000 | 1.0000 |
| **100** | 0.1 | 0.0014218 | 0.0000 | 0.0000 | |
| | | | | | |
| **70** | 20 | 0.65905 | 18.0479 | 0.0251 | 0.9986 |
| **70** | 18 | 0.61224 | 15.5102 | 0.0103 | 0.9993 |
| **70** | 15 | 0.50588 | 11.7605 | 0.0053 | 0.9995 |
| **70** | 12 | 0.34585 | 7.3669 | 0.0018 | 0.9998 |
| **70** | 10 | 0.24777 | 4.7156 | 0.0002 | 1.0000 |
| **70** | 8 | 0.17362 | 3.2005 | 0.0001 | 1.0000 |
| **70** | 2 | 0.032963 | 0.7575 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | 0.0000 | 0.0000 | |
| | | | | | |
| **40** | 20 | 0.83981 | 18.5213 | 0.4788 | 0.9748 |
| **40** | 15 | 0.78023 | 23.1990 | 0.4605 | 0.9805 |
| **40** | 12 | 0.71776 | 20.6803 | 0.0207 | 0.9990 |
| **40** | 10 | 0.62861 | 16.8548 | 0.9998 | 0.9998 |
| **40** | 5 | 0.11305 | 2.1211 | 1.0000 | 1.0000 |
| **40** | 2 | 0.037127 | 0.7196 | 1.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

**4°) EOBudE**
**EOBudE-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [EOBudE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 38.81 | 5.78 | 0.95 | 0.86 |
| **100** | 18 | 0.42481 | 37.29 | 5.61 | 0.96 | 0.85 |
| **100** | 15 | 0.33235 | 31.54 | 5.25 | 1.00 | 0.84 |
| **100** | 12 | 0.24207 | 26.26 | 4.49 | 1.05 | 0.81 |
| **100** | 10 | 0.18856 | 15.78 | 3.62 | 1.14 | 0.76 |
| **100** | 8 | 0.14127 | 15.78 | 2.67 | 1.14 | 0.70 |
| **100** | 5 | 0.080651 | 6.01 | 1.31 | 1.25 | 0.51 |
| **100** | 2 | 0.029774 | 0.90 | 0.47 | 1.31 | 0.27 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 1.31 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 84.50 | 9.39 | 0.86 | 0.92 |
| **70** | 18 | 0.61224 | 79.01 | 8.67 | 0.88 | 0.91 |
| **70** | 15 | 0.50588 | 67.08 | 7.97 | 0.95 | 0.89 |
| **70** | 12 | 0.34585 | 53.44 | 6.65 | 1.03 | 0.87 |
| **70** | 10 | 0.24777 | 45.28 | 6.06 | 1.09 | 0.85 |
| **70** | 8 | 0.17362 | 34.26 | 4.15 | 1.18 | 0.78 |
| **70** | 5 | 0.092865 | 16.11 | 0.97 | 1.36 | 0.42 |
| **70** | 2 | 0.032963 | 8.96 | 0.15 | 1.45 | 0.09 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 1.58 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 58.26 | 10.89 | 0.94 | 0.92 |
| **40** | 18 | 0.83009 | 57.38 | 10.81 | 0.94 | 0.92 |
| **40** | 15 | 0.78023 | 56.50 | 10.68 | 0.95 | 0.92 |
| **40** | 12 | 0.71776 | 58.26 | 10.53 | 0.94 | 0.92 |
| **40** | 10 | 0.62861 | 59.15 | 10.62 | 0.93 | 0.92 |
| **40** | 8 | 0.2779 | 48.26 | 9.54 | 1.00 | 0.91 |
| **40** | 5 | 0.11305 | 24.10 | 5.97 | 1.19 | 0.83 |
| **40** | 2 | 0.037127 | 1.70 | 0.45 | 1.46 | 0.24 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 1.47 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [EOBudE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 12.4044 | 0.0029 | 0.9998 |
| **100** | 18 | 0.42481 | 9.4311 | 0.0012 | 0.9999 |
| **100** | 15 | 0.33235 | 6.1738 | 0.0003 | 1.0000 |
| **100** | 12 | 0.24207 | 4.3368 | 0.0001 | 1.0000 |
| **100** | 10 | 0.18856 | 3.1816 | 0.0001 | 1.0000 |
| **100** | 8 | 0.14127 | 2.1400 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 1.3635 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.5303 | 0.0000 | 0.9999 |
| **100** | 0.1 | 0.0014218 | 0.0000 | 0.0000 | |
| | | | | | |
| **70** | 20 | 0.65905 | 14.9231 | 0.0065 | 0.9996 |
| **70** | 18 | 0.61224 | 13.2376 | 0.0032 | 0.9998 |
| **70** | 15 | 0.50588 | 10.2454 | 0.0008 | 0.9999 |
| **70** | 12 | 0.34585 | 6.0980 | 0.0001 | 1.0000 |
| **70** | 10 | 0.24777 | 4.3368 | 0.0000 | 1.0000 |
| **70** | 8 | 0.17362 | 2.8975 | 0.0000 | 1.0000 |
| **70** | 5 | 0.092865 | 1.3635 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.5681 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | 0.0000 | 0.0000 | |
| | | | | | |
| **40** | 20 | 0.83981 | 27.5358 | 0.0139 | 0.9995 |
| **40** | 18 | 0.83009 | 25.8314 | 0.0106 | 0.9996 |
| **40** | 15 | 0.78023 | 24.5057 | 0.0075 | 0.9997 |
| **40** | 12 | 0.71776 | 21.5514 | 0.0051 | 0.9998 |
| **40** | 10 | 0.62861 | 18.2183 | 0.0039 | 0.9998 |
| **40** | 8 | 0.2779 | 6.5336 | 0.0001 | 1.0000 |
| **40** | 5 | 0.11305 | 2.0453 | 0.0000 | 1.0000 |
| **40** | 2 | 0.037127 | 0.8143 | 0.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

## 5°) EUBudE

### EUBudE-rich phase :

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L-1) | [EUBudE] (mol.L-1) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 50.00 | 5.51 | 1.34 | 0.80 |
| **100** | 18 | 0.42481 | 44.19 | 4.87 | 1.40 | 0.78 |
| **100** | 15 | 0.33235 | 37.12 | 4.22 | 1.47 | 0.74 |
| **100** | 12 | 0.24207 | 31.86 | 3.84 | 1.53 | 0.72 |
| **100** | 10 | 0.18856 | 28.82 | 3.33 | 1.56 | 0.68 |
| **100** | 8.5 | 0.14127 | 24.86 | 2.82 | 1.61 | 0.64 |
| **100** | 7 | 0.1198 | 16.10 | 2.20 | 1.73 | 0.56 |
| **100** | 5 | 0.080651 | 12.88 | 1.42 | 1.78 | 0.44 |
| **100** | 2 | 0.029774 | 7.71 | 0.68 | 1.87 | 0.27 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 2.01 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 77.78 | 7.94 | 1.18 | 0.87 |
| **70** | 18 | 0.61224 | 69.34 | 7.83 | 1.23 | 0.86 |
| **70** | 15 | 0.50588 | 55.70 | 7.07 | 1.34 | 0.84 |
| **70** | 12 | 0.34585 | 46.84 | 6.11 | 1.42 | 0.81 |
| **70** | 11 | 0.29373 | 39.76 | 5.78 | 1.50 | 0.79 |
| **70** | 10 | 0.24777 | 35.28 | 5.38 | 1.54 | 0.78 |
| **70** | 9 | 0.20804 | 29.61 | 4.81 | 1.61 | 0.75 |
| **70** | 7 | 0.1435 | 22.11 | 3.99 | 1.71 | 0.70 |
| **70** | 6 | 0.11681 | 18.07 | 3.48 | 1.77 | 0.66 |
| **70** | 5 | 0.092865 | 14.85 | 2.90 | 1.82 | 0.61 |
| **70** | 3 | 0.051295 | 7.16 | 1.87 | 1.95 | 0.49 |
| **70** | 2 | 0.032963 | 2.20 | 1.19 | 2.04 | 0.37 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 2.09 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 125.00 | 12.26 | 0.97 | 0.93 |
| **40** | 18 | 0.81951 | 112.23 | 11.47 | 1.03 | 0.92 |
| **40** | 15 | 0.78023 | 99.18 | 10.59 | 1.10 | 0.91 |
| **40** | 12 | 0.71776 | 84.79 | 10.22 | 1.18 | 0.90 |
| **40** | 10 | 0.62861 | 76.73 | 9.40 | 1.24 | 0.88 |
| **40** | 9 | 0.4855 | 69.93 | 9.22 | 1.29 | 0.88 |
| **40** | 8 | 0.2779 | 55.77 | 8.12 | 1.41 | 0.85 |
| **40** | 7 | 0.19802 | 47.27 | 0.33 | 1.49 | 0.84 |
| **40** | 6 | 0.14926 | 33.88 | 0.27 | 1.63 | 0.79 |
| **40** | 5 | 0.11305 | 26.23 | 0.23 | 1.73 | 0.75 |
| **40** | 4 | 0.083758 | 19.70 | 0.19 | 1.83 | 0.70 |
| **40** | 3 | 0.058892 | 14.89 | 0.14 | 1.91 | 0.63 |
| **40** | 2.2 | 0.037127 | 13.55 | 0.11 | 1.93 | 0.56 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 2.19 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L-1) | [EUBudE] (mol.L-1) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 7.4990 | 0.0016 | 0.9998 |
| **100** | 19.3 | 0.45352 | 7.0480 | 0.0011 | 0.9998 |
| **100** | 18.1 | 0.42481 | 6.3713 | 0.0007 | 0.9999 |
| **100** | 17.3 | 0.39471 | 5.8639 | 0.0005 | 0.9999 |
| **100** | 15 | 0.33235 | 4.5530 | 0.0002 | 1.0000 |
| **100** | 14 | 0.3013 | 4.0314 | 0.0001 | 1.0000 |
| **100** | 12.5 | 0.24207 | 3.1998 | 0.0001 | 1.0000 |
| **100** | 10 | 0.18856 | 2.2835 | 0.0001 | 1.0000 |
| **100** | 8 | 0.14127 | 1.6069 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 0.7894 | 0.0000 | 1.0000 |
| **100** | 4 | 0.062749 | 0.6343 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.2960 | 0.0000 | 0.9999 |
| **100** | 1 | 0.014525 | 0.1410 | 0.0000 | 0.9999 |
| **100** | 0.1 | 0.0014218 | 0.0000 | 0.0000 | |
| | | | | | |
| **70** | 20 | 0.65905 | 12.3198 | 0.0044 | 0.9996 |
| **70** | 18 | 0.61224 | 11.2062 | 0.0036 | 0.9997 |
| **70** | 17 | 0.58279 | 10.4733 | 0.0029 | 0.9997 |
| **70** | 16 | 0.54775 | 9.6980 | 0.0019 | 0.9998 |
| **70** | 15 | 0.50588 | 8.6831 | 0.0010 | 0.9999 |
| **70** | 14 | 0.45662 | 7.4426 | 0.0005 | 0.9999 |
| **70** | 13.1 | 0.40175 | 6.3009 | 0.0002 | 1.0000 |
| **70** | 12 | 0.34585 | 5.0745 | 0.0001 | 1.0000 |
| **70** | 10 | 0.24777 | 3.3548 | 0.0000 | 1.0000 |
| **70** | 8.6 | 0.20804 | 2.5091 | 0.0000 | 1.0000 |
| **70** | 6 | 0.11681 | 1.4942 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.4934 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | 0.0000 | 0.0000 | |
| | | | | | |
| **40** | 20 | 0.83981 | 19.4523 | 0.0180 | 0.9991 |
| **40** | 18 | 0.83009 | 18.9167 | 0.0149 | 0.9992 |
| **40** | 15 | 0.78023 | 17.2675 | 0.0079 | 0.9995 |
| **40** | 12 | 0.71776 | 15.1108 | 0.0040 | 0.9997 |
| **40** | 10 | 0.62861 | 12.7709 | 0.0033 | 0.9997 |
| **40** | 8 | 0.2779 | 4.2288 | 0.0000 | 1.0000 |
| **40** | 5.5 | 0.11305 | 1.8466 | 0.0000 | 1.0000 |
| **40** | 2 | 0.037127 | 0.5920 | 0.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

## 6°) EOPrdE

### EOPrdE-rich phase :

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [EOPrdE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 37.50 | 5.17 | 0.96 | 0.84 |
| **100** | 18 | 0.42481 | 33.64 | 4.69 | 0.98 | 0.83 |
| **100** | 15 | 0.33235 | 27.11 | 4.18 | 1.03 | 0.80 |
| **100** | 14 | 0.3013 | 24.89 | 4.04 | 1.05 | 0.79 |
| **100** | 12 | 0.24207 | 18.18 | 3.46 | 1.11 | 0.76 |
| **100** | 11.2 | 0.21453 | 16.26 | 3.23 | 1.13 | 0.74 |
| **100** | 10.6 | 0.18856 | 12.60 | 3.09 | 1.17 | 0.73 |
| **100** | 8 | 0.14127 | 8.75 | 2.39 | 1.21 | 0.66 |
| **100** | 6 | 0.099632 | 3.62 | 1.94 | 1.27 | 0.60 |
| **100** | 5 | 0.080651 | 2.88 | 1.64 | 1.28 | 0.56 |
| **100** | 3 | 0.045821 | 0.00 | 1.16 | 1.31 | 0.47 |
| **100** | 2 | 0.029774 | 0.00 | 0.82 | 1.35 | 0.38 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 1.41 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 62.56 | 6.22 | 0.93 | 0.87 |
| **70** | 18 | 0.61224 | 62.56 | 6.13 | 0.93 | 0.87 |
| **70** | 15 | 0.50588 | 64.18 | 6.05 | 0.92 | 0.87 |
| **70** | 14 | 0.45662 | 60.19 | 5.88 | 0.95 | 0.86 |
| **70** | 12 | 0.34585 | 52.78 | 5.62 | 0.99 | 0.85 |
| **70** | 10 | 0.24777 | 35.25 | 5.05 | 1.12 | 0.82 |
| **70** | 8.5 | 0.17362 | 24.53 | 3.51 | 1.22 | 0.74 |
| **70** | 5 | 0.092865 | 8.91 | 1.73 | 1.39 | 0.55 |
| **70** | 4 | 0.07116 | 9.27 | 1.32 | 1.39 | 0.49 |
| **70** | 3 | 0.051295 | 4.10 | 0.95 | 1.46 | 0.40 |
| **70** | 2 | 0.032963 | 0.92 | 0.63 | 1.50 | 0.30 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 1.52 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 85.71 | 9.50 | 0.84 | 0.92 |
| **40** | 18 | 0.81951 | 83.70 | 9.25 | 0.84 | 0.92 |
| **40** | 15 | 0.78023 | 73.33 | 8.88 | 0.90 | 0.91 |
| **40** | 12 | 0.71776 | 64.08 | 8.40 | 0.95 | 0.90 |
| **40** | 10 | 0.62861 | 57.21 | 7.51 | 0.99 | 0.88 |
| **40** | 9 | 0.4855 | 54.34 | 7.17 | 1.01 | 0.88 |
| **40** | 8 | 0.2779 | 45.06 | 6.72 | 1.07 | 0.86 |
| **40** | 7 | 0.19802 | 35.20 | 5.87 | 1.15 | 0.84 |
| **40** | 6 | 0.14926 | 25.65 | 4.83 | 1.24 | 0.80 |
| **40** | 3 | 0.058892 | 10.46 | 2.67 | 1.41 | 0.65 |
| **40** | 2 | 0.037127 | 8.68 | 1.98 | 1.43 | 0.58 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 1.55 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [EOPrdE] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 8.4563 | 0.0012 | 0.9999 |
| **100** | 18 | 0.42481 | 7.1035 | 0.0006 | 0.9999 |
| **100** | 15 | 0.33235 | 5.2636 | 0.0002 | 1.0000 |
| **100** | 12 | 0.24207 | 3.4533 | 0.0001 | 1.0000 |
| **100** | 10 | 0.18856 | 2.7056 | 0.0001 | 1.0000 |
| **100** | 8 | 0.14127 | 1.8201 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 0.9839 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.4329 | 0.0000 | 1.0000 |
| **100** | 0.1 | 0.0014218 | 0.0000 | 0.0000 | |
| | | | | | |
| **70** | 20 | 0.65905 | 12.5876 | 0.0053 | 0.9996 |
| **70** | 18 | 0.61224 | 11.2203 | 0.0035 | 0.9997 |
| **70** | 15 | 0.50588 | 8.7677 | 0.0009 | 0.9999 |
| **70** | 12 | 0.34585 | 5.0322 | 0.0002 | 1.0000 |
| **70** | 10 | 0.24777 | 3.9010 | 0.0001 | 1.0000 |
| **70** | 8 | 0.17362 | 2.7105 | 0.0000 | 1.0000 |
| **70** | 5 | 0.092865 | 1.4660 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.5854 | 0.0000 | 0.9999 |
| **70** | 0.1 | 0.0015473 | 0.0000 | 0.0000 | |
| | | | | | |
| **40** | 20 | 0.83981 | 19.2550 | 0.0213 | 0.9989 |
| **40** | 18 | 0.83009 | 18.2260 | 0.0177 | 0.9990 |
| **40** | 15 | 0.78023 | 17.4930 | 0.0136 | 0.9992 |
| **40** | 12 | 0.71776 | 15.7592 | 0.0083 | 0.9995 |
| **40** | 10 | 0.62861 | 13.6871 | 0.0047 | 0.9997 |
| **40** | 8 | 0.2779 | 5.2440 | 0.0006 | 0.9999 |
| **40** | 5 | 0.11305 | 1.7759 | 0.0001 | 1.0000 |
| **40** | 2.5 | 0.037127 | 0.7871 | 0.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0.0000 | 0.0000 | |

## 7°) EVHOSO

### EVHOSO-rich phase :

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | Swelling (%) | [$CO_2$] (mol.L$^{-1}$) | [EVHOSO] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 4.02 | 0.91 | 0.92 | 0.50 |
| **100** | 18 | 0.42481 | 2.70 | 0.32 | 0.93 | 0.25 |
| **100** | 15 | 0.33235 | 1.03 | 0.26 | 0.95 | 0.22 |
| **100** | 12 | 0.24207 | -0.11 | 0.19 | 0.96 | 0.17 |
| **100** | 10 | 0.18856 | 0.84 | 0.14 | 0.95 | 0.13 |
| **100** | 8 | 0.14127 | 0.43 | 0.15 | 0.96 | 0.14 |
| **100** | 5 | 0.080651 | 1.49 | 0.12 | 0.95 | 0.11 |
| **100** | 2 | 0.029774 | 1.04 | 0.10 | 0.95 | 0.10 |
| **100** | 0.1 | 0.0014218 | 0.00 | 0.00 | 0.95 | |
| | | | | | | |
| **70** | 20 | 0.65905 | 64.73 | 7.86 | 0.60 | 0.93 |
| **70** | 18 | 0.61224 | 64.94 | 7.88 | 0.60 | 0.93 |
| **70** | 15 | 0.50588 | 59.01 | 7.26 | 0.62 | 0.92 |
| **70** | 14 | 0.45662 | 53.25 | 6.86 | 0.65 | 0.91 |
| **70** | 12 | 0.34585 | 48.37 | 6.44 | 0.67 | 0.91 |
| **70** | 10 | 0.24777 | 40.85 | 5.52 | 0.70 | 0.89 |
| **70** | 9 | 0.20804 | 37.50 | 5.01 | 0.72 | 0.87 |
| **70** | 8 | 0.17362 | 31.99 | 4.16 | 0.75 | 0.85 |
| **70** | 6 | 0.11681 | 24.79 | 2.76 | 0.79 | 0.78 |
| **70** | 5 | 0.092865 | 14.52 | 1.47 | 0.86 | 0.63 |
| **70** | 4 | 0.07116 | 10.73 | 0.38 | 0.89 | 0.30 |
| **70** | 2 | 0.032963 | 6.60 | 0.17 | 0.93 | 0.15 |
| **70** | 0.1 | 0.0015473 | 0.00 | 0.00 | 0.98 | |
| | | | | | | |
| **40** | 20 | 0.83981 | 87.26 | 11.18 | 0.57 | 0.95 |
| **40** | 18 | 0.83009 | 93.64 | 11.41 | 0.55 | 0.95 |
| **40** | 15 | 0.78023 | 84.34 | 10.89 | 0.58 | 0.95 |
| **40** | 14 | 0.76327 | 84.64 | 10.55 | 0.57 | 0.95 |
| **40** | 12 | 0.71776 | 80.50 | 10.33 | 0.59 | 0.95 |
| **40** | 10 | 0.62861 | 75.63 | 9.89 | 0.60 | 0.94 |
| **40** | 9 | 0.4855 | 67.78 | 9.14 | 0.63 | 0.94 |
| **40** | 8 | 0.2779 | 61.37 | 8.32 | 0.66 | 0.93 |
| **40** | 5 | 0.11305 | 35.77 | 4.71 | 0.78 | 0.86 |
| **40** | 4 | 0.083758 | 22.19 | 2.49 | 0.87 | 0.74 |
| **40** | 2 | 0.037127 | 10.52 | 0.21 | 0.96 | 0.18 |
| **40** | 0.1 | 0.0016975 | 0.00 | 0.00 | 1.06 | |

**$CO_2$-rich phase :**

| T (°C) | P (MPa) | ρ (g.cm$^{-3}$) | [$CO_2$] (mol.L$^{-1}$) | [EVHOSO] (mol.L$^{-1}$) | $X_{CO_2}$ |
|---|---|---|---|---|---|
| **100** | 20 | 0.48053 | 10.0750 | 0.0001 | 1.0000 |
| **100** | 18 | 0.42481 | 7.7267 | 0.0000 | 1.0000 |
| **100** | 15 | 0.33235 | 6.0033 | 0.0000 | 1.0000 |
| **100** | 12 | 0.24207 | 4.1664 | 0.0000 | 1.0000 |
| **100** | 10 | 0.18856 | 3.1816 | 0.0000 | 1.0000 |
| **100** | 8 | 0.14127 | 1.9127 | 0.0000 | 1.0000 |
| **100** | 5 | 0.080651 | 1.0226 | 0.0000 | 1.0000 |
| **100** | 2 | 0.029774 | 0.3030 | 0.0000 | 1.0000 |
| **100** | 0.1 | 0.0014218 | 0 | 0 | |
| | | | | | |
| **70** | 20 | 0.65905 | 15.7841 | 0.0003 | 1.0000 |
| **70** | 18 | 0.61224 | 13.9243 | 0.0001 | 1.0000 |
| **70** | 15 | 0.50588 | 11.2605 | 0.0000 | 1.0000 |
| **70** | 12 | 0.34585 | 7.2054 | 0.0000 | 1.0000 |
| **70** | 10 | 0.24777 | 5.0890 | 0.0000 | 1.0000 |
| **70** | 8 | 0.17362 | 2.9260 | 0.0000 | 1.0000 |
| **70** | 5 | 0.092865 | 1.6254 | 0.0000 | 1.0000 |
| **70** | 2 | 0.032963 | 0.7039 | 0.0000 | 1.0000 |
| **70** | 0.1 | 0.0015473 | 0 | 0 | |
| | | | | | |
| **40** | 20 | 0.83981 | 25.8693 | 0.0026 | 0.9999 |
| **40** | 18 | 0.83009 | 24.2974 | 0.0019 | 0.9999 |
| **40** | 15 | 0.78023 | 22.1574 | 0.0009 | 1.0000 |
| **40** | 12 | 0.71776 | 19.4872 | 0.0002 | 1.0000 |
| **40** | 10 | 0.62861 | 15.0367 | 0.0001 | 1.0000 |
| **40** | 8 | 0.2779 | 6.0033 | 0.0000 | 1.0000 |
| **40** | 5 | 0.11305 | 1.9127 | 0.0000 | 1.0000 |
| **40** | 2 | 0.037127 | 0.7954 | 0.0000 | 1.0000 |
| **40** | 0.1 | 0.0016975 | 0 | 0 | |