

# (3E,10Z)-Oxacyclotrideca-3,10-diene-2,7-dione

**InChI:** InChI=1S/C12H16O3/c13-11-7-3-1-2-6-10-15-12(14)9-5-4-8-11/h1-2,5,9H,3-4,6-8,10H2/b2-1-,9-5+

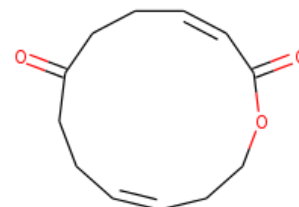
**InChI Key:** QPFMJNUWOHGONF-RLKBUKNLSA-N

**Formula:** C12H16O3

**SMILES:** O=C1C=CCCC(=O)CCC=CCCO1

**Molecular Weight:** 208.25

**CAS:** 144403-15-6



## Physical Properties

Property	Value	Unit	Source
$\Delta_f G^\circ$	-273.76	kJ/mol	Joback Method
$\Delta_f H^\circ_{\text{gas}}$	-551.31	kJ/mol	Joback Method
$\Delta_{\text{fus}} H^\circ$	12.34	kJ/mol	Joback Method
$\Delta_{\text{vap}} H^\circ$	57.84	kJ/mol	Joback Method
$\log P_{\text{oct/wat}}$	2.18		Crippen Method
$P_c$	3005.73	kPa	Joback Method
$T_{\text{boil}}$	688.98	K	Joback Method
$T_c$	967.11	K	Joback Method
$T_{\text{fus}}$	376.51	K	Joback Method
$V_c$	0.59	m <sup>3</sup> /kg-mol	Joback Method

## Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,\text{gas}}$	477.44	J/mol×K	688.98	Joback Method

## Sources

**Joback Method:** [https://en.wikipedia.org/wiki/Joback\\_method](https://en.wikipedia.org/wiki/Joback_method)

**NIST Webbook:** [http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H16O3/c13-11-7-3-1-2-6-10-15-12\(14\)9-5-4-8-11/h1-2,5,9H,3-4,6-8,10H2/b2-1-,9-5+](http://webbook.nist.gov/cgi/inchi/InChI=1S/C12H16O3/c13-11-7-3-1-2-6-10-15-12(14)9-5-4-8-11/h1-2,5,9H,3-4,6-8,10H2/b2-1-,9-5+)

**Crippen Method:** <http://pubs.acs.org/doi/abs/10.1021/ci9903071>

## Legend

$C_{p, \text{gas}}$ : Ideal gas heat capacity (J/mol×K).

$\Delta_f G^\circ$ : Standard Gibbs free energy of formation (kJ/mol).

$\Delta_f H^\circ_{\text{gas}}$ : Enthalpy of formation at standard conditions (kJ/mol).

$\Delta_{\text{fus}} H^\circ$ : Enthalpy of fusion at standard conditions (kJ/mol).

$\Delta_{\text{vap}} H^\circ$ : Enthalpy of vaporization at standard conditions (kJ/mol).

$\log P_{\text{oct/wat}}$ : Octanol/Water partition coefficient .

$P_c$ : Critical Pressure (kPa).

$T_{\text{boil}}$ : Normal Boiling Point Temperature (K).

$T_c$ : Critical Temperature (K).

$T_{\text{fus}}$ : Normal melting (fusion) point (K).

$V_c$ : Critical Volume (m<sup>3</sup>/kg-mol).

Latest version available from:

<https://www.cheméo.com/cid/85-400-3/%283E%2C10Z%29-Oxacyclotrideca-3%2C10-diene-2%2C7-dione>

Generated by Cheméo on Mon, 16 Sep 2019 10:13:28 +0000.

**Cheméo** (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.