

2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate

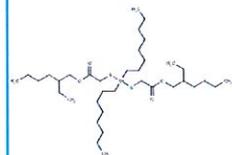
Substance identity

EC / List no.: 239-622-4

CAS no.: 15571-58-1

Mol. formula:

C₃₆H₇₂O₄S₂Sn



Hazard classification & labelling



Danger! According to the **harmonised classification and labelling** (ATP05) approved by the European Union, this substance may damage the unborn child.



Additionally, the classification provided by companies to ECHA in **REACH registrations** identifies that this substance may damage fertility or the unborn child, causes damage to organs through prolonged or repeated exposure, is harmful if swallowed and is harmful to aquatic life with long lasting effects.

Properties of concern

R

Regulatory activities

- Substance of very high concern (SVHC) and included in the candidate list for authorisation.

About this substance

This substance is manufactured and/or imported in the European Economic Area in 1 000 - 10 000 tonnes per year.

This substance is used in articles, in formulation or re-packing, at industrial sites and in manufacturing.

Consumer Uses

ECHA has no public registered data indicating whether or in which chemical products the substance might be used. ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

Article service life

ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment. ECHA has no public registered data indicating whether or into which articles the substance might have been processed.

Widespread uses by professional workers

ECHA has no public registered data indicating whether or in which chemical products the substance might be used. ECHA has no public registered data on the types of manufacture using this substance. ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

Formulation or re-packing

ECHA has no public registered data indicating whether or in which chemical products the substance might be used. ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

Uses at industrial sites

ECHA has no public registered data indicating whether or in which chemical products the substance might be used. ECHA has no public registered data on the types of manufacture using this substance. ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

Manufacture

ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.

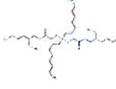
The InfoCard summarises the non-confidential data on substances as held in the databases of the European Chemicals Agency (ECHA), including data provided by third parties. The InfoCard is automatically generated. Information requirements under different legislative frameworks may therefore not be up-to-date or complete. Substance manufacturers and importers are responsible for consulting official publications. This InfoCard is covered by the ECHA Legal Disclaimer.

2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate

Brief Profile - Last updated: 08/09/2017

Substance Description

Substance Identity

	EC / List name: 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	SMILES: <chem>CCCCCCCC[Sn](CCCCCCCC)(SCC(=O)OCC(CC)CCCC)</chem>
	IUPAC name: 2-ethylhexyl 2-(((2-ethylhexyl)oxy)-2-oxoethyl)sulfanyl)dioctylstanny)sulfanyl)acetate Other names:	InChI: InChI=1/2C10H20O2S.2C8H17.Sn/c2*1-3-5-6-9(4-2)7-12-10(11)8-13;2*1-3-5-7-8-6-4-2;/h2*9,13H,3-8H2,1-2H3,2*1,3-8H2,2H3/q;;;+2/p-2 AuxInfo=1/1/N: 41,43,40,42,39,38,36,2,37,1,15,16,3,14,18,13,17,12,11,9,6,10,7,35,8,5,19,26,20,25,21,24,22,23;27,3,4,28,33,29,32,30,31;4/CRV:;2*1,3;/A-43CCSSnSC CCCCCCCCOCCCCCCCCCCCCCCCCCCCCCCCC C/B: s1;s2;s3;s4;s5;s6;s7;s8;s9;s10;s11;s12;s13;d1;s1;s17;s4;s19;s20;s21;s22;s23;s24;s25;s4;s27;s28;s29;s30;s31;s32;s33;d7;s16;s36;s37;s38;s39;s40;s37;s42;/rC:5.3459,-8.4492,0;6.7048,-9.1737,0;7.9734,-8.4266,0;9.3322,-9.1511,0;10.6013,-8.4038,0;11.9601,-9.1285,0;13.2286,-8.3812,0;14.497,-9.1285,0;15.8559,-8.4038,0;17.1248,-9.1511,0;18.4838,-8.4266,0;19.7525,-9.1737,0;21.1114,-8.4492,0;22.3796,-9.1965,0;5.3459,-6.8633,0;4.0775,-9.1511,0;17.4871,-10.7599,0;18.8461,-11.4847,0;9.4455,-10.7599,0;8.0868,-11.4847,0;8.0868,-13.0245,0;6.7954,-13.7496,0;6.7954,-15.2896,0;5.4364,-16.0145,0;5.527,-17.555,0;4.168,-18.2798,0;9.4455,-7.5656,0;10.7373,-6.8407,0;10.7373,-5.3005,0;12.0055,-4.5531,0;12.0055,-3.0125,0;13.3645,-2.2877,0;13.3645,-7472,0;14.6329,0,0;13.4551,-6.8633,0;2.7182,-8.4492,0;2.6276,-6.9087,0;1.3588,-6.1838,0;1.3588,-4.6437,0,0;-3.919,0,0;-2.3782,0;4.0549,-6.0253,0;4.0549,-4.5531,0;
EC / List no.: 239-622-4		Type of substance: Mono constituent substance
CAS no.: 15571-58-1		Origin: Organometallic
Index number: 050-027-00-7		Registered compositions: 7
Molecular formula: C36H72O4S2Sn		Of which contain: 0 impurities relevant for classification 0 additives relevant for classification
		Substance Listed: EINECS (European Inventory of Existing Commercial chemical Substances) List

Hazard classification & labelling



Danger! According to the harmonised classification and labelling (ATP05) approved by the European Union, this substance may damage the unborn child.

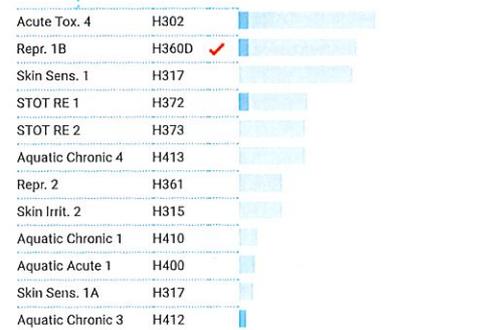


Additionally, the classification provided by companies to ECHA in REACH registrations identifies that this substance may damage fertility or the unborn child, causes damage to organs through prolonged or repeated exposure, is harmful if swallowed and is harmful to aquatic life with long lasting effects.



Additionally, the classification provided by companies to ECHA in CLP notifications identifies that this substance is very toxic to aquatic life with long lasting effects, is very toxic to aquatic life, is suspected of damaging fertility or the unborn child, may cause an allergic skin reaction and causes skin irritation.

Breakdown of all 166 C&L notifications submitted to ECHA



✓ Harmonised Classification
 ■ REACH registration dossiers notifications
 ■ CLP notifications

Properties of concern



Regulatory activities	
Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH)	
Registration	
Pre-registration:	Substance pre-registered under REACH.
Registration:	This substance has 5 active registrations under REACH, 1 Joint Submission(s) and 0 Individual Submission(s).
Evaluation	
Dossier Evaluation:	
Substance Evaluation:	
Authorisation	
Candidate List:	Substance of very high concern (SVHC) and included in the candidate list for authorisation.
Annex XIV (Authorisation List):	
Restriction	
Annex XVII (Restriction List):	
Classification Labelling & Packaging (CLP)	
Harmonised C&L:	A European Union Harmonised Classification & Labelling has been assigned to this substance.
Notification:	Classification & Labelling has been notified by industry to ECHA for this substance.
Biocidal Products Regulation (BPR)	
Active Substance:	
Biocidal Products:	
Prior Informed Consent (PIC)	
Annex I:	This substance is subject to the Prior Informed Consent regulation and to export notification procedure from 03-Dec-2015
Annex V:	

About this substance
General
This substance is manufactured and/or imported in the European Economic Area in 1 000 - 10 000 tonnes per year.
This substance is used in articles, in formulation or re-packing, at industrial sites and in manufacturing.
Consumer Uses
ECHA has no public registered data indicating whether or in which chemical products the substance might be used.
ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.
Article service life
ECHA has no public registered data on the use of this substance in activities or processes at the workplace.
Other release to the environment of this substance is likely to occur from: outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials) and indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment).
This substance can be found in products with material based on: plastic (e.g. food packaging and storage, toys, mobile phones).
Widespread uses by professional workers
ECHA has no public registered data indicating whether or in which chemical products the substance might be used.
ECHA has no public registered data on the types of manufacture using this substance.
ECHA has no public registered data on the use of this substance in activities or processes at the workplace.
ECHA has no public registered data on the routes by which this substance is most likely to be released to the environment.
Formulation or re-packing
This substance is used in the following products: polymers.
This substance is used in the following activities or processes at workplace: closed batch processing in synthesis or formulation, transfer of chemicals at dedicated facilities, closed processes with no likelihood of exposure, closed, continuous processes with occasional controlled exposure, batch processing in synthesis or formulation with opportunity for exposure, mixing in open batch processes and transfer of substance into small containers.
Release to the environment of this substance can occur from industrial use: formulation in materials and formulation of mixtures.
Uses at industrial sites
This substance is used in the following products: polymers.
This substance is used for the manufacture of: plastic products.
This substance is used in the following activities or processes at workplace: transfer of chemicals at dedicated facilities, calendaring operations, production of mixtures or articles by tableting, compression, extrusion or pelletisation and the low energy manipulation of substances bound in materials or articles.
Release to the environment of this substance can occur from industrial use: in the production of articles, as an intermediate step in further manufacturing of another substance (use of intermediates), as processing aid and for thermoplastic manufacture.
Manufacture
This substance is used in the following activities or processes at workplace: closed, continuous processes with occasional controlled exposure, closed batch processing in synthesis or formulation and transfer of chemicals at dedicated facilities.
Release to the environment of this substance can occur from industrial use: manufacturing of the substance.
Precautionary Measures and safe use
Precautions for using this substance have been recommended by its registrants under REACH, as follows:
Prevention statements
When handling this substance: do not handle until all safety precautions have been read and understood; do not breathe the dust, fume, gas, mist, vapours or spray; avoid release to the environment; wear protective gloves and/or clothing, and eye and/or face protection as specified by manufacturer/supplier.
Response statements
In case of incident: If skin irritation or a rash occurs: get medical advice/attention. If exposed or concerned: get medical advice/attention.
Disposal statements
The substance must be disposed in accordance with local/regional/national/international regulation.
Guidance on the safe use of the substance provided by manufacturers and importers of this substance.

Registrants/suppliers
Active
<ul style="list-style-type: none"> Baerlocher Italia SPA, Via San Colombano, 62/A 26900 Lodi Italy BNT Chemicals GmbH, Parsevalstrasse 29 OT Bitterfeld 06749 Bitterfeld-Wolfen Germany Galata Chemicals GmbH, Chemiestrasse 22 68623 Lampertheim 06 Germany pmcvlissingenbv, ENGELANDWEG 33 4389 PC VLISSINGEN OOST Netherlands REAGENS SPA, VIA CODRONCHI, 4 40016 SAN GIORGIO DI PIANO (BO) Italy
Inactive
<ul style="list-style-type: none"> ARKEMA B.V., headquarters Postbus 6030 3196 XH Vondelingenplaat Rotterdam Netherlands

Other names

IUPAC names

-
- 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecan-1-olate
- 2-Ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate
- 2-ethylhexyl 2-(((2-ethylhexyl)oxy)-2-oxoethyl)sulfanyl)diocetylstanny)sulfanyl)acetate
- 8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dioctyl-7-oxo-, 2-ethylhexyl ester
- Di-n-octylzinn-bis-(2-ethylhexylthioglykolat)
- Diocetylzinnbis(2-ethylhexyl mercaptoacetate)
- DOTE, DOT(EHMA)2, Diocetylzin bis(2-ethylhexyl mercaptoacetate)

Regulatory processes names

- 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate
- 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)
- 8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dioctyl-7-oxo-, 2-ethylhexyl ester

Trade names

- 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate de 2-éthylhexyle
- 2-Ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate
- 8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dioctyl-7-oxo-, 2-ethylhexyl ester
- Thermolite 890

Other names

- DOTE

Scientific properties

Physical and chemical properties

This section provides physicochemical information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Appearance/physical state / colour

Study results	1 study submitted 1 study processed	Type of Study provided	C Summaries	1 summary submitted 1 summary processed
C Physical state at 20°C and 1013 hPa Liquid (100%) [1]		Studies with data <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Data waiving no waivers	Physical state at 20°C and 1013 hPa Liquid (100%)
C Form Not specified (100%) [1]		Key study 1		
C Odour Other (100%) [1]		Supporting study		
C Substance type Organometallic (100%) [1]		Weight of evidence		
		Other		

Melting/freezing point

Study results	3 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed
A No automatically processable data submitted		Studies with data <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Data waiving Not feasible	Melting / freezing point at 101 325 Pa -39 °C
		Key study 1	Sci. unjustified	
		Supporting study 1	Exposure cons.	
		Weight of evidence	Other 1	
		Other		

Boiling point

Study results	2 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed
A No automatically processable data submitted		Studies with data <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Data waiving no waivers	Boiling point at 101 325 Pa 275 °C
		Key study 1		
		Supporting study 1		
		Weight of evidence		
		Other		

Density

Study results	4 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed
A No automatically processable data submitted		Studies with data <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Data waiving no waivers	Relative density at 20°C 1.07
		Key study		
		Supporting study 2		
		Weight of evidence 2		
		Other		

Vapour pressure

Study results	1 study submitted 1 study processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																																			
<p>R Vapour pressure 0 - 0 Pa @ 20 °C [2]</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>Vapour pressure</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td>no waivers</td> <td>0 Pa @ 20 °C</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	Vapour pressure	Key study	1				no waivers	0 Pa @ 20 °C	Supporting study							Weight of evidence							Other						
Studies with data	▲	📄	📊	📈	Data waiving	Vapour pressure																																	
Key study	1				no waivers	0 Pa @ 20 °C																																	
Supporting study																																							
Weight of evidence																																							
Other																																							

Partition coefficient

Study results	2 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																																			
<p>▲ No automatically processable data submitted</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>Log Kow (Log Pow)</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> <td>Not feasible</td> <td>15.354 @ 20 °C</td> </tr> <tr> <td>Supporting study</td> <td></td> <td>1</td> <td></td> <td></td> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td>Exposure cons.</td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td>Other</td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	Log Kow (Log Pow)	Key study					Not feasible	15.354 @ 20 °C	Supporting study		1			Sci. unjustified		Weight of evidence					Exposure cons.		Other					Other	
Studies with data	▲	📄	📊	📈	Data waiving	Log Kow (Log Pow)																																	
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Supporting study		1			Sci. unjustified																																		
Weight of evidence					Exposure cons.																																		
Other					Other																																		

Water solubility

Study results	2 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																																			
<p>▲ No automatically processable data submitted</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>Water solubility</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> <td>Not feasible</td> <td>0 ng/L @ 25 °C</td> </tr> <tr> <td>Supporting study</td> <td></td> <td>1</td> <td></td> <td></td> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td>Exposure cons.</td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td>Other</td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	Water solubility	Key study					Not feasible	0 ng/L @ 25 °C	Supporting study		1			Sci. unjustified		Weight of evidence					Exposure cons.		Other					Other	
Studies with data	▲	📄	📊	📈	Data waiving	Water solubility																																	
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Supporting study		1			Sci. unjustified																																		
Weight of evidence					Exposure cons.																																		
Other					Other																																		

Solubility in organic solvents / fat solubility

Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
<p>▲ No automatically processable data submitted</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>▲ No data available</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> <td>no waivers</td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	▲ No data available	Key study					no waivers		Supporting study							Weight of evidence							Other			1			
Studies with data	▲	📄	📊	📈	Data waiving	▲ No data available																																	
Key study					no waivers																																		
Supporting study																																							
Weight of evidence																																							
Other			1																																				

Surface tension

Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
<p>▲ No automatically processable data submitted</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>▲ No data available</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> <td>Not feasible</td> <td>1</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td>Exposure cons.</td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td>Other</td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	▲ No data available	Key study					Not feasible	1	Supporting study					Sci. unjustified		Weight of evidence					Exposure cons.		Other					Other	
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Weight of evidence					Exposure cons.																																		
Other					Other																																		

Flash point

Study results	1 study submitted 1 study processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																																			
<p>R Flash point 182 °C @ 101.3 kPa [1]</p> <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> <td>Data waiving</td> <td>Flash point at 101 325 Pa</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td>no waivers</td> <td>182 °C</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Studies with data	▲	📄	📊	📈	Data waiving	Flash point at 101 325 Pa	Key study	1				no waivers	182 °C	Supporting study							Weight of evidence							Other						
Studies with data	▲	📄	📊	📈	Data waiving	Flash point at 101 325 Pa																																	
Key study	1				no waivers	182 °C																																	
Supporting study																																							
Weight of evidence																																							
Other																																							

Auto flammability

Study results: 1 study submitted, 1 study processed

Type of Study provided: [R] Summaries, 1 summary submitted, 1 summary processed

[R] Autoflammability / self-ignition
390 °C @ 98.96 - 99.92 kPa [1]

Studies with data: 1

Key study: 1

Supporting study: 0

Weight of evidence: 0

Other: 0

Data waiving: no waivers

Autoflammability / self-ignition at 101 325 Pa
390 °C

Flammability

Study results: 1 study submitted, 0 studies processed

Type of Study provided: [C] Summaries, 1 summary submitted, 1 summary processed

⚠ No automatically processable data submitted

Studies with data: 0

Key study: 0

Supporting study: 0

Weight of evidence: 0

Other: 0

Data waiving: Not feasible

Sci. unjustified: 0

Exposure cons.: 0

Other: 1

Flammability: Non flammable (100%)

Explosiveness

Study results: 1 study submitted, 0 studies processed

Type of Study provided: [C] Summaries, 1 summary submitted, 1 summary processed

⚠ No automatically processable data submitted

Studies with data: 0

Key study: 0

Supporting study: 0

Weight of evidence: 0

Other: 0

Data waiving: Not feasible

Sci. unjustified: 1

Exposure cons.: 0

Other: 0

Explosiveness: Non-explosive (100%)

Oxidising

Study results: 1 study submitted, 0 studies processed

Type of Study provided: [C] Summaries, 1 summary submitted, 1 summary processed

⚠ No automatically processable data submitted

Studies with data: 0

Key study: 0

Supporting study: 0

Weight of evidence: 0

Other: 0

Data waiving: Not feasible

Sci. unjustified: 1

Exposure cons.: 0

Other: 0

Oxidising: No (100%)

Oxidation reduction potential

⚠ Data not provided by the registrant

pH

⚠ Data not provided by the registrant

Dissociation constant

Study results: 1 study submitted, 0 studies processed

Type of Study provided: Summaries, 0 summaries submitted, 0 summaries processed

⚠ No automatically processable data submitted

Studies with data: 0

Key study: 0

Supporting study: 0

Weight of evidence: 0

Other: 0

Data waiving: Not feasible, 1

Sci. unjustified: 0

Exposure cons.: 0

Other: 0

⚠ No data available

Viscosity

Study results	1 study submitted 1 study processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																									
R kinematic viscosity (in mm ² /s) 24 - 59.7 [2]		<table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study					Weight of evidence					Other					Data waiving no waivers	Static viscosity at 20 °C 57.9 mm ² /s
Studies with data	▲	📄	📊	📈																									
Key study	1																												
Supporting study																													
Weight of evidence																													
Other																													

Environmental fate and pathways

This section provides environmental fate and pathways information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Phototransformation in air

▲ Data not provided by the registrant

Hydrolysis

Study results	2 studies submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																									
▲ Study data not processed for brief profile		<table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study					Weight of evidence					Other	1				Data waiving no waivers	Half-life for hydrolysis 1 years @ 25 °C
Studies with data	▲	📄	📊	📈																									
Key study	1																												
Supporting study																													
Weight of evidence																													
Other	1																												

Phototransformation in water

▲ Data not provided by the registrant

Phototransformation in soil

▲ Data not provided by the registrant

Biodegradation in water - screening tests

Study results	3 studies submitted 1 study processed	Type of Study provided	C Summaries	1 summary submitted 1 summary processed																									
C Interpretation of results Under test conditions no biodegradation observed (100%) [1]		<table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study	2				Weight of evidence					Other					Data waiving no waivers	Biodegradation in water Under test conditions no biodegradation observed (100%)
Studies with data	▲	📄	📊	📈																									
Key study	1																												
Supporting study	2																												
Weight of evidence																													
Other																													

Biodegradation in water & sediment - simulation tests

▲ Data not provided by the registrant

Biodegradation in soil

Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																									
▲ Study data not processed for brief profile		<table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study					Supporting study					Weight of evidence					Other					Data waiving Not feasible Sci. unjustified Exposure cons. 1 Other	▲ No data available
Studies with data	▲	📄	📊	📈																									
Key study																													
Supporting study																													
Weight of evidence																													
Other																													

Bioaccumulation: aquatic / sediment

Study results	1 study submitted 0 studies processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																														
<p>⚠ Study data not processed for brief profile</p>		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📄</td> <td>📄</td> <td>📄</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📄	📄	📄	Key study	1					Supporting study						Weight of evidence						Other						Data waiving	Bioaccumulation Factor (BCF) - dimensionless
Studies with data	⚠	📄	📄	📄	📄																													
Key study	1																																	
Supporting study																																		
Weight of evidence																																		
Other																																		
		no waivers		99																														

Bioaccumulation: terrestrial

⚠ Data not provided by the registrant

Adsorption/desorption

Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																														
<p>⚠ No automatically processable data submitted</p>		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📄</td> <td>📄</td> <td>📄</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📄	📄	📄	Key study						Supporting study						Weight of evidence						Other						Data waiving	⚠ No data available
Studies with data	⚠	📄	📄	📄	📄																													
Key study																																		
Supporting study																																		
Weight of evidence																																		
Other																																		
		Not feasible		1																														
		Sci. unjustified																																
		Exposure cons.																																
		Other																																

Henry's law constant (H)

⚠ Data not provided by the registrant

Distribution modelling

⚠ Data not provided by the registrant

Ecotoxicological information

This section provides ecotoxicological information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Predicted No-Effect Concentration (PNEC)

R Summaries

1 summary submitted
1 summary processed

The Predicted No-Effect Concentration (PNEC) value is the concentration of a substance below which adverse effects in the environment are not expected to occur. Please note that when more than one summary is provided, PNEC values may refer to constituents of the substance and not to the substance as a whole. More detailed information is available in the dossiers.

Hazard for Aquatic Organisms		Hazard for Air	
Freshwater	28.6 µg/L (1)	Air	No hazard identified (1)
Intermittent releases (freshwater)	1.7 µg/L (1)	Hazard for Terrestrial Organism	
Marine water	2.86 µg/L (1)	Soil	No data available: testing technically not feasible (1)
Intermittent releases (marine water)	-	Hazard for Predators	
Sewage treatment plant (STP)	100 mg/L (1)	Secondary poisoning	No potential for bioaccumulation (1)
Sediment (freshwater)	No or insufficient data available at present (1)		
Sediment (marine water)	No or insufficient data available at present (1)		

Short-term toxicity to fish

Study results	2 studies submitted 1 study processed	Type of Study provided	R Summaries	1 summary submitted 1 summary processed																														
<p>P/R Results</p> <p>LC0 (4 days) 24.8 mg/L [1]</p> <p>LC100 (4 days) 24.8 mg/L [1]</p> <p>NOEC (4 days) 24.8 mg/L [1]</p>		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📄</td> <td>📄</td> <td>📄</td> </tr> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📄	📄	📄	Key study	1					Supporting study						Weight of evidence						Other	1					Data waiving	LC50 for freshwater fish
Studies with data	⚠	📄	📄	📄	📄																													
Key study	1																																	
Supporting study																																		
Weight of evidence																																		
Other	1																																	
		no waivers		24.8 mg/L																														

Long-term toxicity to fish																																						
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries 1 summary submitted 0 summaries processed																																			
<p>⚠ No automatically processable data submitted</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study					Supporting study					Weight of evidence					Other					<p>⚠ No automatically processable data submitted</p> <table border="1"> <thead> <tr> <th>Data waiving</th> <th></th> </tr> </thead> <tbody> <tr> <td>Not feasible</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td>1</td> </tr> <tr> <td>Exposure cons.</td> <td></td> </tr> <tr> <td>Other</td> <td></td> </tr> </tbody> </table>	Data waiving		Not feasible		Sci. unjustified	1	Exposure cons.		Other	
Studies with data	⚠	📄	📊	⚠																																		
Key study																																						
Supporting study																																						
Weight of evidence																																						
Other																																						
Data waiving																																						
Not feasible																																						
Sci. unjustified	1																																					
Exposure cons.																																						
Other																																						

Short-term toxicity to aquatic invertebrates																												
Study results	3 studies submitted 1 study processed	Type of Study provided	R Summaries 1 summary submitted 1 summary processed																									
<p>P/R Results EC50 (48 h) 24.12 mg/L [1]</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>2</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study	1				Supporting study					Weight of evidence					Other	2				<p>Data waiving no waivers</p> <p>EC50 / LC50 for freshwater invertebrates 24.12 mg/L</p>
Studies with data	⚠	📄	📊	⚠																								
Key study	1																											
Supporting study																												
Weight of evidence																												
Other	2																											

Long-term toxicity to aquatic invertebrates																												
Study results	1 study submitted 1 study processed	Type of Study provided	R Summaries 1 summary submitted 1 summary processed																									
<p>P/R Results NOEC (21 days) 286 - 1 448 µg/L [4] LOEC (21 days) 1.448 - 3.213 mg/L [4] EC50 (21 days) 617 - 3 213 µg/L [2] LC50 (21 days) 3.213 mg/L [1]</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study	1				Supporting study					Weight of evidence					Other					<p>Data waiving no waivers</p> <p>EC10 / LC10 or NOEC for freshwater invertebrates 286 µg/L</p>
Studies with data	⚠	📄	📊	⚠																								
Key study	1																											
Supporting study																												
Weight of evidence																												
Other																												

Toxicity to aquatic algae and cyanobacteria																												
Study results	3 studies submitted 1 study processed	Type of Study provided	R Summaries 1 summary submitted 1 summary processed																									
<p>P/R Results EC50 (72 h) 100 mg/L [1]</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>1</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study	2				Supporting study					Weight of evidence					Other	1				<p>Data waiving no waivers</p> <p>EC50 / LC50 for freshwater algae 100 mg/L</p>
Studies with data	⚠	📄	📊	⚠																								
Key study	2																											
Supporting study																												
Weight of evidence																												
Other	1																											

Toxicity to aquatic plants other than algae			
<p>⚠ Data not provided by the registrant</p>			

Toxicity to microorganisms																												
Study results	1 study submitted 1 study processed	Type of Study provided	R Summaries 1 summary submitted 1 summary processed																									
<p>P/R Results EC50 (3 h) 100 mg/L [1]</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study	1				Supporting study					Weight of evidence					Other					<p>Data waiving no waivers</p> <p>EC50 / LC50 100 mg/L</p>
Studies with data	⚠	📄	📊	⚠																								
Key study	1																											
Supporting study																												
Weight of evidence																												
Other																												

Sediment toxicity																																						
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries 0 summaries submitted 0 summaries processed																																			
<p>⚠ No automatically processable data submitted</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Key study					Supporting study					Weight of evidence					Other					<p>⚠ No data available</p> <table border="1"> <thead> <tr> <th>Data waiving</th> <th></th> </tr> </thead> <tbody> <tr> <td>Not feasible</td> <td>1</td> </tr> <tr> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Exposure cons.</td> <td></td> </tr> <tr> <td>Other</td> <td></td> </tr> </tbody> </table>	Data waiving		Not feasible	1	Sci. unjustified		Exposure cons.		Other	
Studies with data	⚠	📄	📊	⚠																																		
Key study																																						
Supporting study																																						
Weight of evidence																																						
Other																																						
Data waiving																																						
Not feasible	1																																					
Sci. unjustified																																						
Exposure cons.																																						
Other																																						

Toxicity to terrestrial macroorganisms except arthropods																																							
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
<p>⚠ No automatically processable data submitted</p>		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📊</td> <td>⚠</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠	Key study					Supporting study					Weight of evidence					Other					<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Not feasible</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Exposure cons.</td> <td>1</td> </tr> <tr> <td>Other</td> <td></td> </tr> </table>	Data waiving		Not feasible		Sci. unjustified		Exposure cons.	1	Other		<p>⚠ No data available</p>
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Data waiving																																							
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Exposure cons.	1																																						
Other																																							

Toxicity to terrestrial arthropods																																							
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
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Key study																																							
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Exposure cons.	1																																						
Other																																							

Toxicity to terrestrial plants																																							
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
<p>⚠ No automatically processable data submitted</p>		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📊</td> <td>⚠</td> </tr> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠	Key study					Supporting study					Weight of evidence					Other					<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Not feasible</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td></td> </tr> <tr> <td>Exposure cons.</td> <td>1</td> </tr> <tr> <td>Other</td> <td></td> </tr> </table>	Data waiving		Not feasible		Sci. unjustified		Exposure cons.	1	Other		<p>⚠ No data available</p>
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Data waiving																																							
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Sci. unjustified																																							
Exposure cons.	1																																						
Other																																							

Toxicity to soil microorganisms																																							
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
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Data waiving																																							
Not feasible																																							
Sci. unjustified																																							
Exposure cons.	1																																						
Other																																							

Toxicity to birds																																							
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																																			
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Data waiving																																							
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Sci. unjustified																																							
Exposure cons.	1																																						
Other																																							

Toxicity to mammals				
<p>⚠ Data not provided by the registrant</p>				

Toxicological information

This section provides toxicological information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Derived No- or Minimal Effect Level (DN(M)EL)					
M/C Summaries			1 summary submitted 1 summary processed		
The derived no- or minimum effect level (DN(M)EL) is the level of exposure above which a human should not be exposed to a substance. Please note that when more than one summary is provided, DN(M)EL values may refer to constituents of the substance and not to the substance as a whole. More detailed information is available in the dossiers.					
Data for WORKERS			Data for the GENERAL POPULATION		
INHALATION Exposure	Threshold	Most sensitive study	INHALATION Exposure	Threshold	Most sensitive study
Systemic Effects			Systemic Effects		
Long-term:	(DNEL) 62 µg/m³	repeated dose toxicity	Long-term:	No hazard identified	
Acute /short term:	No hazard identified		Acute /short term:	No hazard identified	
Local Effects			Local Effects		
Long-term:	No hazard identified		Long-term:	No hazard identified	
Acute /short term:	No hazard identified		Acute /short term:	No hazard identified	
DERMAL Exposure	Threshold	Most sensitive study	DERMAL Exposure	Threshold	Most sensitive study
Systemic Effects			Systemic Effects		
Long-term:	No hazard identified		Long-term:	No hazard identified	
Acute /short term:	No hazard identified		Acute /short term:	No hazard identified	
Local Effects			Local Effects		
Long-term:	High hazard (no threshold derived)		Long-term:	No hazard identified	
Acute /short term:	High hazard (no threshold derived)		Acute /short term:	No hazard identified	
EYE Exposure	Threshold	Most sensitive study	ORAL Exposure	Threshold	Most sensitive study
Systemic Effects			Systemic Effects		
Long-term:	(DNEL) 1.25 µg/kg bw/day	repeated dose toxicity	Long-term:	No hazard identified	
Acute /short term:	No hazard identified		Acute /short term:	No hazard identified	
EYE Exposure			EYE Exposure		
No hazard identified			No hazard identified		

Toxicokinetics, metabolism, and distribution																																	
Study results		Type of Study provided	M/C Summaries																														
Study data: basic toxicokinetics		1 summary submitted 1 summary processed																															
Study data: basic toxicokinetics		Bioaccumulation potential: Low bioaccumulation potential																															
<p>⚠ Study data not processed for brief profile</p> <table border="1"> <thead> <tr> <th>Studies with data</th> <th>Δ</th> <th>📄</th> <th>📊</th> <th>📌</th> <th>Data waiving</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>2</td> <td></td> <td></td> <td></td> <td>no waivers</td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td>2</td> <td></td> <td></td> <td>1</td> <td></td> </tr> </tbody> </table>		Studies with data	Δ	📄	📊	📌	Data waiving	Key study	2				no waivers	Supporting study	1					Weight of evidence						Other	2			1		Absorption values Oral: 100 % Dermal: 0.004 % Inhalation: 100 %	
Studies with data	Δ	📄	📊	📌	Data waiving																												
Key study	2				no waivers																												
Supporting study	1																																
Weight of evidence																																	
Other	2			1																													
Study data: dermal absorption		1 study submitted 0 studies processed																															
<p>⚠ Study data not processed for brief profile</p> <table border="1"> <thead> <tr> <th>Studies with data</th> <th>Δ</th> <th>📄</th> <th>📊</th> <th>📌</th> <th>Data waiving</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td>no waivers</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Studies with data	Δ	📄	📊	📌	Data waiving	Key study	1				no waivers	Supporting study						Weight of evidence						Other							
Studies with data	Δ	📄	📊	📌	Data waiving																												
Key study	1				no waivers																												
Supporting study																																	
Weight of evidence																																	
Other																																	

Acute toxicity

Study results

oral 8 studies submitted
1 study processed

P/R Results
LD50 2 000 mg/kg bw (rat) [3]

M/C Interpretations of results
Toxicity Category IV [1]

Type of Study provided

oral

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study	1					no waivers
Supporting study	1			1		
Weight of evidence						
Other	4				1	

Summaries

1 summary submitted
0 summaries processed

▲ No automatically processable data submitted

inhalation

1 study submitted
0 studies processed

▲ No automatically processable data submitted

inhalation

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study						Not feasible
Supporting study						Sci. unjustified
Weight of evidence						Exposure cons.
Other						Other 1

dermal

1 study submitted
1 study processed

P/R Results
LD0 2 000 mg/kg bw (rat) [1]

M/C Interpretations of results
Not classified [1]

dermal

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study	1					no waivers
Supporting study						
Weight of evidence						
Other						

other routes

0 studies submitted
0 studies processed

▲ No data available

other routes

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study						no waivers
Supporting study						
Weight of evidence						
Other						

Irritation / corrosion

Study results

Study data: skin 2 studies submitted
0 studies processed

▲ Study data not processed for brief profile

Type of Study provided

Study data: skin

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study	2					no waivers
Supporting study						
Weight of evidence						
Other					1	

M/C Summaries

1 summary submitted
1 summary processed

Skin
Adverse effect observed (irritating)

Eye
No adverse effect observed (not irritating)

Study data: eye

3 studies submitted
0 studies processed

▲ Study data not processed for brief profile

Study data: eye

Studies with data	▲	📄	📊	📈	🚫	Data waiving
Key study	1					no waivers
Supporting study						
Weight of evidence						
Other	1				1	

Sensitisation		Type of Study provided		M/C	Summaries	1 summary submitted 1 summary processed																														
Study results																																				
Study data: skin	1 studies submitted 0 studies processed	Study data: skin		Skin sensitisation No adverse effect observed (not sensitising)																																
⚠ Study data not processed for brief profile		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>📈</th> <th>Data waiving</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td>Not feasible</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td>Sci. unjustified</td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td>Exposure cons.</td> </tr> <tr> <td>Other</td> <td>2</td> <td></td> <td></td> <td></td> <td>Other</td> </tr> </tbody> </table>		Studies with data	⚠	📄	📊	📈	Data waiving	Key study	1				Not feasible	Supporting study					Sci. unjustified	Weight of evidence					Exposure cons.	Other	2				Other	1		
Studies with data	⚠	📄	📊	📈	Data waiving																															
Key study	1				Not feasible																															
Supporting study					Sci. unjustified																															
Weight of evidence					Exposure cons.																															
Other	2				Other																															
Study data: respiratory		6 studies submitted 0 studies processed		Study data: respiratory																																
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Key study					no waivers																															
Supporting study																																				
Weight of evidence																																				
Other																																				

Repeated dose toxicity		Type of Study provided		M/C	Summaries	1 summary submitted 1 summary processed																														
Study results																																				
Study data: oral	4 studies submitted 1 study processed	Study data: oral		Oral route - systemic effects: Adverse effect observed NOAEL 500 µg/kg bw/day (subchronic, rat)																																
<p>P/R Results</p> <p>NOAEL (rat): 10 ppm [1]</p>		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>📈</th> <th>Data waiving</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> <td>no waivers</td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> </tr> </tbody> </table>		Studies with data	⚠	📄	📊	📈	Data waiving	Key study	1				no waivers	Supporting study	1			1		Weight of evidence						Other				1				
Studies with data	⚠	📄	📊	📈	Data waiving																															
Key study	1				no waivers																															
Supporting study	1			1																																
Weight of evidence																																				
Other				1																																
Study data: inhalation		0 studies submitted 0 studies processed		Study data: inhalation																																
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Key study					no waivers																															
Supporting study																																				
Weight of evidence																																				
Other																																				
Study data: dermal		0 studies submitted 0 studies processed		Study data: dermal																																
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Key study					no waivers																															
Supporting study																																				
Weight of evidence																																				
Other																																				

Genetic toxicity																																	
Study results		Type of Study provided	Summaries 1 summary submitted 0 summaries processed																														
Study data: <i>in vitro</i>	6 studies submitted 0 studies processed	Study data: <i>in vitro</i>	⚠ No automatically processable data submitted																														
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Studies with data	⚠	📄	📊	⚠	Data waiving																												
Key study	2				no waivers																												
Supporting study	3																																
Weight of evidence																																	
Other	1																																
Study data: <i>in vivo</i>	5 studies submitted 0 studies processed	Study data: <i>in vivo</i>																															
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Studies with data	⚠	📄	📊	⚠	Data waiving																												
Key study				2	no waivers																												
Supporting study																																	
Weight of evidence																																	
Other				3																													

8

Carcinogenicity																																	
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries 0 summaries submitted 0 summaries processed																														
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Studies with data	⚠	📄	📊	⚠	Data waiving																												
Key study					Not feasible																												
Supporting study					Sci. unjustified																												
Weight of evidence					Exposure cons.																												
Other					Other 1																												

9

Toxicity to reproduction																																	
Study results		Type of Study provided	M/C Summaries 1 summary submitted 1 summary processed																														
Study data: reproduction	1 study submitted 0 studies processed	Study data: reproduction	Effect on fertility																														
⚠ Study data not processed for brief profile		<table border="1"> <thead> <tr> <th>Studies with data</th> <th>⚠</th> <th>📄</th> <th>📊</th> <th>⚠</th> <th>Data waiving</th> </tr> </thead> <tbody> <tr> <td>Key study</td> <td></td> <td></td> <td></td> <td>1</td> <td>no waivers</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weight of evidence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	⚠	Data waiving	Key study				1	no waivers	Supporting study						Weight of evidence						Other						Oral route: Adverse effect observed NOAEL 1.5 mg/kg bw/day (chronic, rat)
Studies with data	⚠	📄	📊	⚠	Data waiving																												
Key study				1	no waivers																												
Supporting study																																	
Weight of evidence																																	
Other																																	
Study data: developmental	5 studies submitted 0 studies processed	Study data: developmental	Effect on developmental toxicity																														
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Studies with data	⚠	📄	📊	⚠	Data waiving																												
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Hemotoxicity

⚠ Data not provided by the registrant

Immunotoxicity

⚠ Data not provided by the registrant

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