

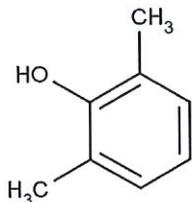
## 2,6-xylenol

### Substance identity

EC / List no.: 209-400-1

CAS no.: 576-26-1

Mol. formula: C<sub>8</sub>H<sub>10</sub>O



### Hazard classification & labelling



**Danger!** According to the **harmonised classification and labelling (CLP00)** approved by the European Union, this substance is toxic if swallowed, is toxic in contact with skin, causes severe skin burns and eye damage and is toxic to aquatic life with long lasting effects.

**Additionally**, the classification provided by companies to ECHA in **REACH registrations** identifies that this substance causes serious eye damage and may cause respiratory irritation.

### 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 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.



about INFOCARD - Last updated: 12/05/2017



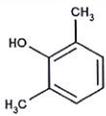
The Brief Profile summarizes the non-confidential data on substances as it is held in the databases of the European Chemicals Agency (ECHA), including data provided by third parties. The Brief Profile is automatically generated; note that it does not currently distinguish between harmonised classification and minimum classification; information requirements under different legislative frameworks may therefore not be fully up to date or complete. For accuracy reasons, substance manufacturers and imports have the responsibility to consult official sources, e.g. the electronic edition of the Official Journal of the European Union. This Brief Profile is covered by the ECHA Legal Notice.

## 2,6-xylenol

Brief Profile - Last updated: 09/09/2017

### Substance Description

#### Substance identity

	EC / List name: 2,6-xylenol	SMILES: Cc1cccc(C)c1O
	IUPAC name: 2,6-dimethylphenol	InChI: InChI=1S/C8H10O/c1-6-4-3-5-7(2)8(6)9/i3-5,9H,1-2H3 AuxInfo=1/0/N:8,9,7,6,5,3,4,1,2/E:(1,2)(4,5)(6,7)/rA:9C0CCCCC/rB:s1,d+1:s1:d-4:s3:s5d-6:s3:s4/rC:2.6684,-1.5314,0,2.6684,0,0,4.0143,-2.3205,0,1.3459,-2.3205,0,1.3459,-3.8519,0,4.0143,-3.8519,0,2.6684,-4.6407,0,5.3368,-1.5547,0,0,-1.5547,0;
	Other names	
EC / List no.: 209-400-1	Type of substance: Mono constituent substance	
CAS no.: 576-26-1	Origin: Organic	
Index number: 604-006-00-X	Registered compositions: 5	
Molecular formula: C8H10O	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 (CLP00) approved by the European Union, this substance is toxic if swallowed, is toxic in contact with skin, causes severe skin burns and eye damage and is toxic to aquatic life with long lasting effects.

Additionally, the classification provided by companies to ECHA in REACH registrations identifies that this substance causes serious eye damage and may cause respiratory irritation.

#### Breakdown of all 1263 C&L notifications submitted to ECHA

Acute Tox. 3	H301	✓	
Acute Tox. 3	H311	✓	
Aquatic Chronic 2	H411	✓	
Skin Corr. 1B	H314	✓	
Eye Dam. 1	H318		
Skin Corr. 1C	H314		
Acute Tox. 2	H310		
Aquatic Chronic 4	H413		
Aquatic Chronic 1	H410		
STOT SE 3	H335		
STOT SE 1	H370		
STOT RE 1	H372		
Aquatic Chronic 3	H412		

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

- ✓ 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 6 active registrations under REACH, 1 Joint Submission(s) and 2 Individual Submission(s).

###### Evaluation

Dossier Evaluation:

Substance Evaluation:

###### Authorisation

Candidate List:

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:

Annex V:

## About this substance

### General

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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.

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 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

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 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.

### Uses at industrial sites

This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

This substance is used for the manufacture of: chemicals and plastic products.

This substance is used in the following activities or processes at workplace: closed processes with no likelihood of exposure, closed, continuous processes with occasional controlled exposure, transfer of chemicals at dedicated facilities, closed batch processing in synthesis or formulation, laboratory work and transfer of substance into small containers.

Release to the environment of this substance can occur from industrial use: as an intermediate step in further manufacturing of another substance (use of intermediates) and for thermoplastic manufacture.

### Manufacture

This substance is used in the following activities or processes at workplace: closed processes with no likelihood of exposure, 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 breathe the dust, fume, gas, mist, vapours or spray; do not eat, drink or smoke when using this product; avoid release to the environment; wash parts of the body (as specified by manufacturer/supplier) in contact with substance thoroughly after handling; wear protective gloves and/or clothing, and eye and/or face protection as specified by manufacturer/supplier.

#### Response statements

In case of incident: Wash contaminated clothing before reuse. Call a poison center or doctor/physician if you feel unwell. Follow specific measures (see label). If swallowed: Immediately call a poison center or doctor/physician. If on skin (or hair): take off immediately all contaminated clothing. Rinse skin with water or shower. If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. Collect spillage. If swallowed: rinse mouth. Do not induce vomiting. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a poison center or doctor/physician. Rinse the mouth. Remove/take off immediately all contaminated clothing. If on skin: wash with soap and water. Follow specific treatment (see label).

#### Storage statements

Store this substance locked up.

#### 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

- BASF SE, Carl-Bosch-Str. 38 67056 Ludwigshafen am Rhein Rheinland-Pfalz Germany
- Charles River Laboratories Den Bosch B.V. OR26, Hambakenwetering 7 5231DD 's-Hertogenbosch Netherlands
- REACH24H CONSULTING GROUP, Suite 1E, Paramount Court, Corrig Road, Sandyford Dublin 18 Dublin Ireland
- SABIC Innovative Plastics BV, Plasticslaan 1 4612 PX Bergen op Zoom Netherlands Netherlands
- SI Group-Béthune S.A.S., 1111 Avenue George Washington Boite Postale 237 62404 Cedex Béthune France
- SI Group-UK, Ltd., Four Ashes WV 10 7BT Wolverhampton United Kingdom

### Inactive

Partition coefficient				
<b>Study results</b>	3 studies submitted 2 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
<b>R</b> Log Pow 2.32 - 2.36 [2]		<b>Studies with data</b> Weight of evidence 3	<b>Data waiving</b> no waivers	No data available

Water solubility				
<b>Study results</b>	3 studies submitted 3 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
<b>R</b> Water solubility (mass/vol.) 5.296 - 6.231 g/L @ 25 °C [3]		<b>Studies with data</b> Weight of evidence 2      1	<b>Data waiving</b> no waivers	No data available

Solubility in organic solvents / fat solubility No data not provided by the registrant

Surface tension				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b>	<b>Data waiving</b> Sci. unjustified 1	No data available

Flash point				
<b>Study results</b>	3 studies submitted 3 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
<b>R</b> Flash point 73 - 88 °C @ 101.325 kPa [3]		<b>Studies with data</b> Weight of evidence 3	<b>Data waiving</b> no waivers	No data available

Auto flammability				
<b>Study results</b>	3 studies submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 2	<b>Data waiving</b> Sci. unjustified 1	No data available

Flammability				
<b>Study results</b>	3 studies submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1      1	<b>Data waiving</b> Sci. unjustified 1	No data available

Explosiveness				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b>	<b>Data waiving</b> Other 1	No data available

Oxidising				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b>	<b>Data waiving</b> Other 1	No data available

Oxidation reduction potential No data not provided by the registrant

pH No data not provided by the registrant

Other names
<b>IUPAC names</b> <ul style="list-style-type: none"> <li>-</li> <li>1-Hydroxy-2,6-dimethylbenzene</li> <li>2,6 Xylenol</li> <li>2,6-XYLENOL</li> <li>2,6-dimethyl phenol</li> <li>2,6-Dimethylphenol</li> <li>2,6-dimethylphenol (xilenol)</li> <li>2,6-Xylenol</li> <li>DIMETHYL XYLENOL</li> <li>PHENOL, 2,6-DIMETHYL-</li> </ul>
<b>Regulatory processes names</b> <ul style="list-style-type: none"> <li>2,6-xylenol</li> </ul>
<b>Trade names</b> <ul style="list-style-type: none"> <li>1-Hydroxy-2,6-dimethylbenzene</li> <li>2,6-Dimethylphenol</li> <li>2,6-Xylenol (BCI)</li> <li>2,6-XYLEON</li> <li>Phenol, 2,6-dimethyl- (9CI)</li> </ul>
Other names

## 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		Type of Study provided		Summaries	
<b>Study results</b>	2 studies submitted 2 studies processed			0 summaries submitted	0 summaries processed
<b>C</b> Physical state at 20°C and 1013 hPa	Solid (100%) [2]	<b>Studies with data</b>		<b>Data waiving</b>	
<b>C</b> Form	Crystalline (50%), Other (50%) [2]	<b>Key study</b>	1	no waivers	
<b>C</b> Substance type	Organic (100%) [1]				

Melting/freezing point		Type of Study provided		Summaries	
<b>Study results</b>	6 studies submitted 4 studies processed			0 summaries submitted	0 summaries processed
<b>R</b> Melting / freezing point	45.56 - 48 °C [4]	<b>Studies with data</b>		<b>Data waiving</b>	
		<b>Weight of evidence</b>	6	no waivers	

Boiling point		Type of Study provided		Summaries	
<b>Study results</b>	6 studies submitted 3 studies processed			0 summaries submitted	0 summaries processed
<b>R</b> Boiling point	201 - 203 °C @ 101.3 - 101.325 kPa [3]	<b>Studies with data</b>		<b>Data waiving</b>	
		<b>Weight of evidence</b>	6	no waivers	

Density		Type of Study provided		Summaries	
<b>Study results</b>	2 studies submitted 1 study processed			0 summaries submitted	0 summaries processed
<b>R</b> Relative density	1.02 - 1.03 @ 15 °C [1]	<b>Studies with data</b>		<b>Data waiving</b>	
		<b>Weight of evidence</b>	2	no waivers	

Vapour pressure		Type of Study provided		Summaries	
<b>Study results</b>	4 studies submitted 4 studies processed			0 summaries submitted	0 summaries processed
<b>R</b> Vapour pressure	2.666 - 35.997 Pa @ 4.9 - 25 °C [5]	<b>Studies with data</b>		<b>Data waiving</b>	
		<b>Weight of evidence</b>	2	no waivers	

Dissociation constant												
Study results	2 studies submitted 2 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td style="border: 1px solid black; padding: 2px;">C</td> <td>Dissociating properties Yes (100%) [2]</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving no waivers         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">R</td> <td>Dissociation constant 10.598 - 10.684 @ 20 - 25 °C [3]</td> <td>Key study 2</td> </tr> </table>					C	Dissociating properties Yes (100%) [2]	Studies with data	Data waiving no waivers	No data available	R	Dissociation constant 10.598 - 10.684 @ 20 - 25 °C [3]	Key study 2
C	Dissociating properties Yes (100%) [2]	Studies with data	Data waiving no waivers	No data available								
R	Dissociation constant 10.598 - 10.684 @ 20 - 25 °C [3]				Key study 2							

Viscosity												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> No automatically processable data submitted</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving Not feasible 1         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> </table>					No automatically processable data submitted		Studies with data	Data waiving Not feasible 1	No data available			
No automatically processable data submitted		Studies with data	Data waiving Not feasible 1	No data available								

### 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												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> No automatically processable data submitted</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving no waivers         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td>Supporting study 1</td> </tr> </table>					No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available			Supporting study 1
No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available								
					Supporting study 1							

Hydrolysis												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> Study data not processed for brief profile</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving Sci. unjustified 1         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> </table>					Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available			
Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available								

Phototransformation in water												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> No automatically processable data submitted</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving no waivers         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td>Key study 1</td> </tr> </table>					No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available			Key study 1
No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available								
					Key study 1							

Phototransformation in soil			Data not provided by the registrant	
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Biodegradation in water - screening tests															
Study results	6 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed											
<table border="0"> <tr> <td colspan="2"> No automatically processable data submitted</td> <td rowspan="3">           Studies with data      </td> <td rowspan="3">           Data waiving no waivers         </td> <td rowspan="3">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td>Supporting study 1</td> </tr> <tr> <td colspan="2"></td> <td>Weight of evidence 4 1</td> </tr> </table>					No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available			Supporting study 1			Weight of evidence 4 1
No automatically processable data submitted		Studies with data	Data waiving no waivers	No data available											
					Supporting study 1										
					Weight of evidence 4 1										

Biodegradation in water & sediment - simulation tests			Data not provided by the registrant	
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Biodegradation in soil												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> Study data not processed for brief profile</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving Sci. unjustified 1         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> </table>					Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available			
Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available								

Bioaccumulation: aquatic / sediment												
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed								
<table border="0"> <tr> <td colspan="2"> Study data not processed for brief profile</td> <td rowspan="2">           Studies with data      </td> <td rowspan="2">           Data waiving Sci. unjustified 1         </td> <td rowspan="2">  No data available         </td> </tr> <tr> <td colspan="2"></td> <td></td> </tr> </table>					Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available			
Study data not processed for brief profile		Studies with data	Data waiving Sci. unjustified 1	No data available								

**Adsorption/desorption**

Study results 2 studies submitted  
0 studies processed

Type of Study provided

Summaries 0 summaries submitted  
0 summaries processed

⚠ No automatically processable data submitted

Studies with data	⚠	📄	📊	⚠
Supporting study	1			

Data waiving  
Sci. unjustified 1

⚠ No data available

**Henry's law constant (H)**

Study results 3 studies submitted  
2 studies processed

Type of Study provided

Summaries 0 summaries submitted  
0 summaries processed

**R** H - (pressure) m<sup>3</sup>/mol  
0.473 - 0.77 Pa m<sup>3</sup>/mol @ 25 °C and 101.325 kPa [3]

Studies with data	⚠	📄	📊	⚠
Key study	2		1	

Data waiving  
no waivers

⚠ No data available

Distribution modelling

**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**

Freshwater	10.8 µg/L (1)
Intermittent releases (freshwater)	110 µg/L (1)
Marine water	1.08 µg/L (1)
Intermittent releases (marine water)	-
Sewage treatment plant (STP)	-
Sediment (freshwater)	216 µg/kg sediment dw (1)
Sediment (marine water)	21.6 µg/kg sediment dw (1)

**Hazard for Air**

Air -

**Hazard for Terrestrial Organism**

Soil 37.1 µg/kg soil dw (1)

**Hazard for Predators**

Secondary poisoning No potential for bioaccumulation (1)

**Short-term toxicity to fish**

Study results 2 studies submitted  
1 study processed

Type of Study provided

Summaries 0 summaries submitted  
0 summaries processed

**P/R** Results  
LC50 (8 days) 23 mg/L [1]  
LC50 (4 days) 27 mg/L [1]  
LC50 (48 h) 6.7 mg/L [1]

Studies with data	⚠	📄	📊	⚠
Key study	1			
Supporting study	1			

Data waiving  
no waivers

⚠ No data available

**Long-term toxicity to fish**

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	⚠	📄	📊	⚠
Weight of evidence	3			

Data waiving  
Sci. unjustified 1

⚠ No data available

**Short-term toxicity to aquatic invertebrates**

Study results 3 studies submitted  
2 studies processed

Type of Study provided

Summaries 0 summaries submitted  
0 summaries processed

**P/R** Results  
EC50 (48 h) 11 mg/L [1]  
IC50 (24 h) 117 µmol/L [1]

Studies with data	⚠	📄	📊	⚠
Weight of evidence	3			

Data waiving  
no waivers

⚠ No data available

Long-term toxicity to aquatic invertebrates				
<b>Study results</b>	1 study submitted 1 study processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
<b>P/R</b> Results	NOEC (21 days) 540 µg/L [1] EC50 (21 days) 1.1 mg/L [1]	<b>Studies with data</b> Key study 1	<b>Data waiving</b>	No data available no waivers

Toxicity to aquatic algae and cyanobacteria				
<b>Study results</b>	2 studies submitted 1 study processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
<b>P/R</b> Results	EC50 (72 h) 10 - 48 mg/L [4] NOEC (72 h) 2 - 4 mg/L [4]	<b>Studies with data</b> Key study 1 Supporting study 1	<b>Data waiving</b>	No data available no waivers

Toxicity to aquatic plants other than algae				
				Data not provided by the registrant

Toxicity to microorganisms				
<b>Study results</b>	2 studies submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Sediment toxicity				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Toxicity to terrestrial macroorganisms except arthropods				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Toxicity to terrestrial arthropods				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Toxicity to terrestrial plants				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Toxicity to soil microorganisms				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

Toxicity to birds				
<b>Study results</b>	1 study submitted 0 studies processed	<b>Type of Study provided</b>	Summaries	0 summaries submitted 0 summaries processed
No automatically processable data submitted		<b>Studies with data</b> Supporting study 1	<b>Data waiving</b>	No data available Sci. unjustified 1

### 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
<p>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.</p>							
<b>Data for WORKERS</b>				<b>Data for the GENERAL POPULATION</b>			
INHALATION Exposure	Threshold	Most sensitive study		INHALATION Exposure	Threshold	Most sensitive study	
Long-term:	(DNEL) 2 mg/m <sup>3</sup>	repeated dose toxicity		Long-term:	No hazard identified		
Acute /short term:	(DNEL) 6 mg/m <sup>3</sup>	repeated dose toxicity		Acute /short term:	No hazard identified		
Long-term:	(DNEL) 2 mg/m <sup>3</sup>	irritation (respiratory tract)		Long-term:	No hazard identified		
Acute /short term:	(DNEL) 16 mg/m <sup>3</sup>	irritation (respiratory tract)		Acute /short term:	No hazard identified		
DERMAL Exposure	Threshold	Most sensitive study		DERMAL Exposure	Threshold	Most sensitive study	
Long-term:	(DNEL) 200 µg/kg bw/day	repeated dose toxicity		Long-term:	No hazard identified		
Acute /short term:	(DNEL) 600 µg/kg bw/day	repeated dose toxicity		Acute /short term:	No hazard identified		
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			ORAL Exposure			Threshold	Most sensitive study
High hazard (no threshold derived)			Long-term:	No hazard identified			
			Acute /short term:	No hazard identified			
			EYE Exposure				
			No hazard identified				

Toxicokinetics, metabolism, and distribution			
Study results	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
Study data: basic toxicokinetics 1 study submitted 0 studies processed	Study data: basic toxicokinetics	⚠ No data available	
⚠ Study data not processed for brief profile	<b>Studies with data</b> <b>Data waiving</b> Key study 1 no waivers		
Study data: dermal absorption 0 studies submitted 0 studies processed	Study data: dermal absorption		
⚠ Study data not processed for brief profile	<b>Studies with data</b> <b>Data waiving</b> no waivers		

Acute toxicity		Summaries																			
Study results	Type of Study provided	0 summaries submitted 0 summaries processed																			
<b>oral</b> 2 studies submitted 1 study processed  <b>[P/R] Results</b> LD50 1 470 mg/kg bw (rat) [1]  <b>[M/C] Interpretations of results</b> Toxicity Category IV [1]	<b>oral</b>  <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>1</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📌	📈	Key study	1					Supporting study	1					▲ No data available  <b>Data waiving</b> no waivers	
Studies with data	▲	📄	📊	📌	📈																
Key study	1																				
Supporting study	1																				
<b>inhalation</b> 1 study submitted 0 studies processed  ▲ No automatically processable data submitted	<b>inhalation</b>  <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📌</td> <td>📈</td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📌	📈	Supporting study	1					<b>Data waiving</b> Sci. unjustified 1							
Studies with data	▲	📄	📊	📌	📈																
Supporting study	1																				
<b>dermal</b> 2 studies submitted 0 studies processed  ▲ No automatically processable data submitted	<b>dermal</b>  <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📌</td> <td>📈</td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📌	📈	Supporting study	1					<b>Data waiving</b> Sci. unjustified 1							
Studies with data	▲	📄	📊	📌	📈																
Supporting study	1																				
<b>other routes</b> 0 studies submitted 0 studies processed  ▲ No data available	<b>other routes</b>  <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📌</td> <td>📈</td> </tr> </table>	Studies with data	▲	📄	📊	📌	📈	<b>Data waiving</b> no waivers													
Studies with data	▲	📄	📊	📌	📈																

Irritation / corrosion		Summaries													
Study results	Type of Study provided	0 summaries submitted 0 summaries processed													
<b>Study data: skin</b> 1 study submitted 0 studies processed  ▲ Study data not processed for brief profile	<b>Study data: skin</b>  <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> </table>	Studies with data	▲	📄	📊	📌	📈	Key study	1					▲ No data available  <b>Data waiving</b> no waivers	
Studies with data	▲	📄	📊	📌	📈										
Key study	1														
<b>Study data: eye</b> 1 study submitted 0 studies processed  ▲ Study data not processed for brief profile	<b>Study data: eye</b>  <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> </table>	Studies with data	▲	📄	📊	📌	📈	Key study	1					<b>Data waiving</b> no waivers	
Studies with data	▲	📄	📊	📌	📈										
Key study	1														

Sensitisation		Summaries													
Study results	Type of Study provided	0 summaries submitted 0 summaries processed													
<b>Study data: skin</b> 1 study submitted 0 studies processed  ▲ Study data not processed for brief profile	<b>Study data: skin</b>  <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> </table>	Studies with data	▲	📄	📊	📌	📈	Key study	1					▲ No data available  <b>Data waiving</b> no waivers	
Studies with data	▲	📄	📊	📌	📈										
Key study	1														
<b>Study data: respiratory</b> 0 studies submitted 0 studies processed  ▲ Study data not processed for brief profile	<b>Study data: respiratory</b>  <table border="1"> <tr> <td>Studies with data</td> <td>▲</td> <td>📄</td> <td>📊</td> <td>📌</td> <td>📈</td> </tr> </table>	Studies with data	▲	📄	📊	📌	📈	<b>Data waiving</b> no waivers							
Studies with data	▲	📄	📊	📌	📈										

X

Repeated dose toxicity		Type of Study provided	Summaries																									
<b>Study results</b>			0 summaries submitted 0 summaries processed																									
<b>Study data: oral</b>	5 studies submitted 1 study processed	<b>Study data: oral</b>	⚠ No data available																									
<b>P/R Results</b> NOAEL (rat): 200 mg/kg bw/day [1]		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</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>1</td> <td></td> </tr> <tr> <td>Supporting study</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Key study					1		Supporting study	3						<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td>1</td> </tr> </table>	Data waiving		Sci. unjustified	1
Studies with data	⚠	📄	📊	⚠																								
Key study					1																							
Supporting study	3																											
Data waiving																												
Sci. unjustified	1																											
<b>Study data: inhalation</b>	2 studies submitted 1 study processed	<b>Study data: inhalation</b>																										
<b>P/R Results</b> NOAEC (rat): 200 mg/m <sup>3</sup> air [1] LOEC (rat): 670 mg/m <sup>3</sup> air [1]		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</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> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Key study	1						<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td>1</td> </tr> </table>	Data waiving		Sci. unjustified	1							
Studies with data	⚠	📄	📊	⚠																								
Key study	1																											
Data waiving																												
Sci. unjustified	1																											
<b>Study data: dermal</b>	1 study submitted 0 studies processed	<b>Study data: dermal</b>																										
⚠ No automatically processable data submitted		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</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> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Key study							<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Sci. unjustified</td> <td>1</td> </tr> </table>	Data waiving		Sci. unjustified	1							
Studies with data	⚠	📄	📊	⚠																								
Key study																												
Data waiving																												
Sci. unjustified	1																											

X

Genetic toxicity		Type of Study provided	Summaries																		
<b>Study results</b>			0 summaries submitted 0 summaries processed																		
<b>Study data: in vitro</b>	2 studies submitted 6 studies processed	<b>Study data: In vitro</b>	⚠ No data available																		
⚠ Study data not processed for brief profile		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</td> <td>📄</td> <td>📊</td> <td>⚠</td> <td></td> <td></td> </tr> <tr> <td>Key study</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Key study	3						<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>no waivers</td> <td></td> </tr> </table>	Data waiving		no waivers	
Studies with data	⚠	📄	📊	⚠																	
Key study	3																				
Data waiving																					
no waivers																					
<b>Study data: in vivo</b>	2 studies submitted 6 studies processed	<b>Study data: In vivo</b>																			
⚠ Study data not processed for brief profile		<table border="1"> <tr> <td>Studies with data</td> <td>⚠</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>1</td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Key study	1				1		<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>no waivers</td> <td></td> </tr> </table>	Data waiving		no waivers	
Studies with data	⚠	📄	📊	⚠																	
Key study	1				1																
Data waiving																					
no waivers																					

6

Carcinogenicity		Type of Study provided	Summaries																		
<b>Study results</b>	2 studies submitted 0 studies processed		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> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	⚠	📄	📊	⚠			Supporting study	1						<table border="1"> <tr> <td>Data waiving</td> <td></td> </tr> <tr> <td>Other</td> <td>1</td> </tr> </table>	Data waiving		Other	1
Studies with data	⚠	📄	📊	⚠																	
Supporting study	1																				
Data waiving																					
Other	1																				
			⚠ No data available																		

Toxicity to reproduction		Type of Study provided	Summaries
Study results			0 summaries submitted 0 summaries processed
Study data: reproduction	2 studies submitted 0 studies processed	Study data: reproduction	⚠ No data available
⚠ Study data not processed for brief profile		<b>Studies with data</b> <b>Key study</b>       1	<b>Data waiving</b> Sci. unjustified   1
Study data: developmental	1 study submitted 0 studies processed	Study data: developmental	
⚠ Study data not processed for brief profile		<b>Studies with data</b> <b>Key study</b>   1	<b>Data waiving</b> no waivers
Study data: other studies	0 studies submitted 0 studies processed	Study data: other studies	
⚠ Study data not processed for brief profile		<b>Studies with data</b> <b>Key study</b>	<b>Data waiving</b> no waivers

Neurotoxicity ⚠ Data not provided by the registrant

Immunotoxicity ⚠ Data not provided by the registrant

Legend	Type of study	Type of aggregation
	Experimental results	Concatenated distinct values
	Read across based on grouping of substance (category approach) or Read-across from supporting substance (structural analogue or surrogate)	Range of values
	Estimated by calculation or (Q)SAR	Prioritisation (Eco)Toxicology AND Range of values
	Experimental study planned, other or unspecified	Most Conservative of values

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