

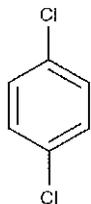
1,4-dichlorobenzene

Substance identity

EC / List no.: 203-400-5

CAS no.: 106-46-7

Mol. formula: C₆H₄Cl₂



Hazard classification & labelling



Warning! According to the **harmonised classification and labelling** (CLP00) approved by the European Union, this substance is very toxic to aquatic life, is very toxic to aquatic life with long lasting effects, causes serious eye irritation and is suspected of causing cancer.



Regulatory activities

Some uses of this substance are restricted under Annex XVII of REACH.

About this substance

This substance is manufactured and/or imported in the European Economic Area in 10 000 - 100 000 tonnes per year.

This substance is used by consumers, in articles, by professional workers (widespread uses), 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.



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; 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.

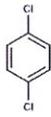
1,4-dichlorobenzene

Brief Profile - Last updated: 18/12/2017



Substance Description

Substance Identity



EC / List name: 1,4-dichlorobenzene

IUPAC name: 1,4-dichlorobenzene

Other names

SMILES: ClC1=CC=C(C1)C=C1

InChI: InChI=1S/C6H4Cl2/c7-5-1-2-6(8)4-3-5/h1-4H
AuxInfo=1/0/N:2,3,6,5,1,4,7,8/E:(1,2,3,4)(5,6)(7,8)/A:8CCCCC(Cl)/rB:d-1;s2;d-3;s4;s1d-5;s1;s4;/C:2.294,-1.3245,0,3,11,-2.6332,0,2.294,-3.9417,0;7946,-3.9417,0,0;-2.6224,0;7946,-1.3034,0;3.0463,0,0;0,265,-5.2884,0;

EC / List no.: 203-400-5

CAS no.: 106-46-7

Index number: 602-035-00-2

Molecular formula: C6H4Cl2

Type of substance: Mono constituent substance

Origin: Organic

Registered compositions: 6

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



Warning! According to the harmonised classification and labelling (CLP00) approved by the European Union, this substance is very toxic to aquatic life, is very toxic to aquatic life with long lasting effects, causes serious eye irritation and is suspected of causing cancer.



Breakdown of all 291 C&L notifications submitted to ECHA

Aquatic Chronic 1	H410	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Eye Irrit. 2	H319	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Carc. 2	H351	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aquatic Acute 1	H400	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Acute Tox. 3	H331	<input type="checkbox"/>	<input type="checkbox"/>
Acute Tox. 4	H302	<input type="checkbox"/>	<input type="checkbox"/>
Acute Tox. 4	H312	<input type="checkbox"/>	<input type="checkbox"/>

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

- Harmonised Classification
- REACH registration dossiers notifications
- CLP notifications

At least one notifier has indicated that an impurity or an additive present in the substance impacts the notified classification.

Properties of substance

Regulatory activities

Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH)

Registration

Pre-registration: Substance pre-registered under REACH.

Registration: This substance has 10 active registrations under REACH, 1 Joint Submission(s) and 0 Individual Submission(s).

Evaluation

Dossier Evaluation:

Substance Evaluation:

Authorisation

Candidate List:

Annex XIV (Substances of Very High Concern):

None

Restriction

Annex XVII (Restriction List): Some uses of this substance are restricted under Annex XVII of REACH.

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

This substance is manufactured and/or imported in the European Economic Area in 10 000 - 100 000 tonnes per year.

This substance is used by consumers, in articles, by professional workers (widespread uses), in formulation or re-packing, at industrial sites and in manufacturing.

Consumer Uses

This substance is used in the following products: polymers and air care products.

Other release to the environment of this substance is likely to occur from: 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) and indoor use as processing aid.

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: 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 complex articles, with no release intended: vehicles, machinery, mechanical appliances and electrical/electronic products (e.g. computers, cameras, lamps, refrigerators, washing machines) and electrical batteries and accumulators. 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

This substance is used in the following products: air care products and laboratory chemicals.

ECHA has no public registered data on the types of manufacture using this substance.

This substance is used in the following activities or processes at workplace: non-industrial spraying and laboratory work.

Other release to the environment of this substance is likely to occur from: indoor use as processing aid and indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters).

Formulation or re-packing

This substance is used in the following products: air care products.

This substance is used in the following activities or processes at workplace: production of mixtures or articles by tableting, compression, extrusion or pelletisation.

Release to the environment of this substance can occur from industrial use: formulation of mixtures.

Uses at industrial sites

This substance is used in the following products: fillers, putties, plasters, modelling clay, metal surface treatment products, non-metal-surface treatment products, heat transfer fluids and polymers. This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

This substance is used for the manufacture of chemicals, mineral products (e.g. plasters, cement) and plastic products.

This substance is used in the following activities or processes at workplace: transfer of chemicals, transfer of substance into small containers, closed processes with no likelihood of exposure, closed batch processing in synthesis or formulation, closed, continuous processes with occasional controlled exposure, mixing in open batch processes, production of mixtures or articles by tableting, compression, extrusion or pelletisation, potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens) and heat / pressure transfer fluids in closed systems.

Release to the environment of this substance can occur from industrial use: for thermoplastic manufacture, as an intermediate step in further manufacturing of another substance (use of intermediates), of substances in closed systems with minimal release and in processing aids at industrial sites.

Manufacture

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

Release to the environment of this substance can occur from industrial use: manufacturing of the substance.

Precautionary Measures and safe use

ECHA has no data from registration dossiers on the precautionary measures for using this substance. Guidance on the safe use of the substance provided by manufacturers and importers of this substance.

Registrants/suppliers

Active

- Celanese Europe BV, The New Atrium Strawinskylaan 3105 1077 ZX Amsterdam Netherlands
- DSM Engineering Plastics B.V., Urmonderbaan 22 6167RD Geleen Netherlands
- Envigo Consulting Limited, Woolley Road Alconbury PE28 4HS Huntingdon Cambridgeshire United Kingdom
- Envigo Consulting Limited, Woolley Road Alconbury PE28 4HS Huntingdon Cambridgeshire United Kingdom
- Envigo Consulting Limited, Woolley Road PE28 4HS Huntingdon United Kingdom
- Lanxess Deutschland GmbH, Kennedyplatz 1 50569 Köln Germany
- PCC Rokita SA, Sienkiewicza 4 56-120 Brzeg Dolny Poland
- Solvay Specialty Polymers Italy S.p.A., Viale Lombardia 20 20021 BOLLATE Italy
- TOSOH EUROPE B.V., Amstelplein 1 1096 HA Amsterdam Netherlands

Inactive

Other names

IUPAC names

-
- 1,4-dichlorobenzene
- 1,4-dichloro-benzene
- 1,4-Dichlorobenzene
- 1,4-diclorobenceno
- Benzene, 1,4-dichloro-
- p-Dichlorbenzol
- p-dichlorobenzene, PDB
- PDCB

Regulatory processes names

- 1,4-Dichlorobenzene
- p-dichlorobenzene

Trade names

- 1,4-DCB
- 1,4-DICHLOROBENZENE
- BENZENE, 1,4-DICHLORO-
- DI-CHLOROCIDE
- p-DCB
- P-DICHLORBENZOL
- P-DICHLOROBENZENE
- PARADI
- PARADICHLOROBENZENE
- PARADOW
- PARAMOTH
- PDB
- SANTOCHLOR

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

Study results	3 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
C Physical state at 20°C and 1013 hPa Solid (100%) [1]	Studies with data Key study 1 Supporting study 2	Data waiving no waivers	No data available	
C Form Crystalline (100%) [1]				
C Substance type Organic (100%) [1]				

Melting/freezing point

Study results	7 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
R Melting / freezing point 53.3 °C [1]	Studies with data Key study 1 Supporting study 6	Data waiving no waivers	No data available	

Boiling point

Study results	7 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
R Boiling point 174.12 °C @ 101.3 kPa [1]	Studies with data Key study 1 Supporting study 6	Data waiving no waivers	No data available	

Density

Study results	6 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
R Relative density 1.46 @ 20 °C [1]	Studies with data Key study 1 Supporting study 4	Data waiving no waivers	No data available	1

Vapour pressure																			
Study results	8 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
R Vapour pressure 53 Pa @ 25 °C [1]		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td>6</td> <td></td> <td></td> <td>1</td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study	6			1	Data waiving no waivers	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study	1																		
Supporting study	6			1															

Partition coefficient																			
Study results	4 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
R Log Pow 3.37 @ 25 °C and pH 7 [1]		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td>3</td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study	3				Data waiving no waivers	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study	1																		
Supporting study	3																		

Water solubility																			
Study results	6 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
R Water solubility (mass/vol.) 51.2 - 82.9 mg/L @ 10 - 25 °C [2]		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td>4</td> <td></td> <td></td> <td>1</td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study	4			1	Data waiving no waivers	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study	1																		
Supporting study	4			1															

Solubility in organic solvents / fat solubility ▲ Data not provided by the registrant

Surface tension																			
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
▲ No automatically processable data submitted		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study					Supporting study					Data waiving Sci. unjustified	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study																			
Supporting study																			

Flash point																			
Study results	3 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
R Flash point 66 °C @ 101.3 kPa [1]		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td>2</td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Supporting study	2				Data waiving no waivers	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study	1																		
Supporting study	2																		

Auto flammability														
Study results	1 study submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed										
R Autoflammability / self-ignition 500 °C [1]		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study	1				Data waiving no waivers	▲ No data available
Studies with data	▲	📄	📊	📈										
Key study	1													

Flammability														
Study results	2 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed										
▲ No automatically processable data submitted		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Supporting study</th> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Supporting study	1				Data waiving Not feasible	▲ No data available
Studies with data	▲	📄	📊	📈										
Supporting study	1													

Explosiveness																			
Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed															
▲ No automatically processable data submitted		<table border="1"> <tr> <th>Studies with data</th> <td>▲</td> <td>📄</td> <td>📊</td> <td>📈</td> </tr> <tr> <th>Key study</th> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <th>Supporting study</th> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Studies with data	▲	📄	📊	📈	Key study					Supporting study					Data waiving Sci. unjustified	▲ No data available
Studies with data	▲	📄	📊	📈															
Key study																			
Supporting study																			

Oxidising									
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 <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving Sci. unjustified: 1	⚠ No data available
⚠	📄	📊	📑	⚠					

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 <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving Sci. unjustified: 1	⚠ No data available
⚠	📄	📊	📑	⚠					

Viscosity									
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 <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving - Sci. unjustified: 1	⚠ No data available
⚠	📄	📊	📑	⚠					

Environmental fate and pathways

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Phototransformation in air									
Study results	2 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed					
R Dissipation half life (DT50) 33 days [1]		Studies with data <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving no waivers	⚠ No data available
⚠	📄	📊	📑	⚠					
		Key study : 1							
		Weight of evidence : 1							

Hydrolysis									
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		Studies with data <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving Sci. unjustified: 1	⚠ No data available
⚠	📄	📊	📑	⚠					

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	14 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed					
C Interpretation of results Readily biodegradable (100%) [1]		Studies with data <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving no waivers	⚠ No data available
⚠	📄	📊	📑	⚠					
		Key study : 1							
		Supporting study : 11							
		Other : 2							

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		Studies with data <table border="1"> <tr> <td>⚠</td> <td>📄</td> <td>📊</td> <td>📑</td> <td>⚠</td> </tr> </table>	⚠	📄	📊	📑	⚠	Data waiving no waivers	⚠ No data available
⚠	📄	📊	📑	⚠					
		Key study : 1							

Bioaccumulation: aquatic / sediment														
Study results	10 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed										
<p>⚠ Study data not processed for brief profile</p>		<p>Studies with data</p> <table border="1"> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td>7</td> <td></td> <td></td> <td>2</td> </tr> </table>	Key study	1				Supporting study	7			2	<p>Data waiving</p> <p>no waivers</p>	<p>⚠ No data available</p>
Key study	1													
Supporting study	7			2										

Bioaccumulation: terrestrial ⚠ Data not provided by the registrant

Adsorption/desorption														
Study results	4 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed										
<p>⚠ No automatically processable data submitted</p>		<p>Studies with data</p> <table border="1"> <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>1</td> </tr> </table>	Key study	1				Supporting study	2			1	<p>Data waiving</p> <p>no waivers</p>	<p>⚠ No data available</p>
Key study	1													
Supporting study	2			1										

Henry's law constant (H)														
Study results	2 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed										
<p>R H - (pressure) m³/mol 214.8 - 394.2 Pa m³/mol @ 10 - 30 °C and 101.325 kPa [5]</p>		<p>Studies with data</p> <table border="1"> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Supporting study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>	Key study	1				Supporting study	1				<p>Data waiving</p> <p>no waivers</p>	<p>⚠ No data available</p>
Key study	1													
Supporting study	1													

Distribution modelling																
Study results	1 study submitted 1 study processed	Type of Study provided	⚠ No summary exists for this scientific endpoint													
<p>% Distribution in Media:</p> <table border="1"> <tr> <td>R Air</td> <td>95.94 % [1]</td> </tr> <tr> <td>R Water</td> <td>2.95 % [1]</td> </tr> <tr> <td>R Soil</td> <td>0.5 % [1]</td> </tr> <tr> <td>R Sediment</td> <td>0.6 % [1]</td> </tr> </table>		R Air	95.94 % [1]	R Water	2.95 % [1]	R Soil	0.5 % [1]	R Sediment	0.6 % [1]	<p>Studies with data</p> <table border="1"> <tr> <td>Key study</td> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>	Key study	1				<p>Data waiving</p> <p>no waivers</p>
R Air	95.94 % [1]															
R Water	2.95 % [1]															
R Soil	0.5 % [1]															
R Sediment	0.6 % [1]															
Key study	1															

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)				
<p>R Summaries</p>			<p>1 summary submitted 1 summary processed</p>	
<p>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.</p>				
Hazard for Aquatic Organisms			Hazard for Air	
Freshwater	20 µg/L (1)		Air	-
Intermittent releases (freshwater)	7 µg/L (1)		Hazard for Terrestrial Organism	
Marine water	2 µg/L (1)		Soil	108 µg/kg soil dw (1)
Intermittent releases (marine water)	-		Hazard for Predators	
Sewage treatment plant (STP)	8.6 mg/L (1)		Secondary poisoning	10 mg/kg food (1)
Sediment (freshwater)	980 µg/kg sediment dw (1)			
Sediment (marine water)	98 µg/kg sediment dw (1)			

Short-term toxicity to fish				
Study results	11 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	LC50 (4 days) 1.12 mg/L [1] LC50 (72 h) 1.24 mg/L [1] LC50 (48 h) 1.24 mg/L [1] LC50 (24 h) 1.37 mg/L [1]	Studies with data Key study 1 Supporting study 9 Other 1	Data waiving no waivers	⚠ No data available

Long-term toxicity to fish				
Study results	3 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	NOEC (14 days) 200 - 230 µg/L [1]	Studies with data Key study 1 Supporting study 2	Data waiving no waivers	⚠ No data available

Short-term toxicity to aquatic invertebrates				
Study results	3 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	EC50 (48 h) 700 µg/L [1] LC50 (48 h) 2.2 mg/L [1]	Studies with data Key study 1 Supporting study 1 Other 1	Data waiving no waivers	⚠ No data available

Long-term toxicity to aquatic invertebrates				
Study results	2 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	NOEC (28 days) 220 µg/L [1]	Studies with data Key study 1 Supporting study 1	Data waiving no waivers	⚠ No data available

Toxicity to aquatic algae and cyanobacteria				
Study results	4 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	EC50 (4 days) 1.6 mg/L [1] EC0 (4 days) 570 µg/L [1]	Studies with data Key study 1 Supporting study 3	Data waiving no waivers	⚠ No data available

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

Toxicity to microorganisms				
Study results	5 studies submitted 1 study processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
P/R Results	IC50 (48 h) 86 mg/L [1] IC50 (24 h) 86 mg/L [1] IC50 (12 h) 330 mg/L [1]	Studies with data Key study 1 Supporting study 2 Other 2	Data waiving no waivers	⚠ No data available

Sediment toxicity				
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 Weight of evidence 1	Data waiving Sci. unjustified 1	⚠ No data available

Toxicity to terrestrial macroorganisms except arthropods				
Study results	3 studies submitted 2 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed
<p>P/R Results</p> <p>LC50 (14 days) 96 - 258 mg/kg soil dw [4]</p>		Studies with data	Data waiving Sci. unjustified	No data available
		Key study	2	1

Toxicity to terrestrial arthropods				
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	Data waiving Other	No data available
				1

Toxicity to terrestrial plants				
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	Data waiving Sci. unjustified	No data available
		Key study	1	1

Toxicity to soil microorganisms				
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	Data waiving Sci. unjustified	No data available
				1

Toxicity to birds				
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	Data waiving Exposure cons.	No data available
				1

Toxicity to mammals				
			Data not provided by the registrant	

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.

Acute toxicity		Summaries																									
Study results	Type of Study provided	0 summaries submitted	0 summaries processed																								
oral 9 studies submitted 1 study processed [P/R] Results LD50 2 000 mg/kg bw (rat) [1] LD0 2 000 mg/kg bw (rat) [1]	oral <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></td> <td></td> </tr> <tr> <td>Other</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	🏠	Data waiving	Key study	1				no waivers	Supporting study	1					Other	7					⚠ No data available	
Studies with data	⚠	📄	📊	🏠	Data waiving																						
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Supporting study	1																										
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inhalation 3 studies submitted 1 study processed [P/R] Results LC50 (4 h) 5.07 mg/L air (rat) [1]	inhalation <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>Other</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	🏠	Data waiving	Key study	1				no waivers	Other	2												
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Other	1																										
other routes 7 studies submitted 0 studies processed ⚠ No automatically processable data submitted	other routes <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>Other</td> <td>7</td> <td></td> <td></td> <td></td> <td>no waivers</td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	🏠	Data waiving	Other	7				no waivers														
Studies with data	⚠	📄	📊	🏠	Data waiving																						
Other	7				no waivers																						

Irritation / corrosion		Summaries																			
Study results	Type of Study provided	0 summaries submitted	0 summaries processed																		
Study data: skin 2 studies submitted 0 studies processed ⚠ Study data not processed for brief profile	Study data: skin <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>Other</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data	⚠	📄	📊	🏠	Data waiving	Key study	1				no waivers	Other	3					⚠ No data available	
Studies with data	⚠	📄	📊	🏠	Data waiving																
Key study	1				no waivers																
Other	3																				
Study data: eye 1 study submitted 0 studies processed ⚠ Study data not processed for brief profile	Study data: eye <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> </tbody> </table>	Studies with data	⚠	📄	📊	🏠	Data waiving	Key study	1				no waivers								
Studies with data	⚠	📄	📊	🏠	Data waiving																
Key study	1				no waivers																

Carcinogenicity

Study results	10 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																								
<p>⚠ Study data not processed for brief profile</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>3</td> <td></td> <td></td> <td></td> <td>no waivers</td> </tr> <tr> <td>Supporting study</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>Other</td> <td>6</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data					Data waiving	Key study	3				no waivers	Supporting study				1		Other	6					<p>⚠ No data available</p>	
Studies with data					Data waiving																							
Key study	3				no waivers																							
Supporting study				1																								
Other	6																											

Toxicity to reproduction

Study results	2 studies submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed																								
<p>⚠ Study data not processed for brief profile</p>		<p>Study data: reproduction</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></td> <td></td> </tr> <tr> <td>Other</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Studies with data					Data waiving	Key study	1				no waivers	Supporting study	1					Other	1					<p>⚠ No data available</p>	
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Key study	2				no waivers																							
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<p>⚠ Study data not processed for brief profile</p>		<p>Study data: other studies</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>Other</td> <td></td> <td></td> <td></td> <td>1</td> <td>no waivers</td> </tr> </tbody> </table>	Studies with data					Data waiving	Other				1	no waivers														
Studies with data					Data waiving																							
Other				1	no waivers																							

Neurotoxicity ⚠ Data not provided by the registrant

Immunotoxicity

Study results	1 study submitted 0 studies processed	Type of Study provided	Summaries	0 summaries submitted 0 summaries processed												
<p>⚠ Study data not processed for brief profile</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>Other</td> <td></td> <td></td> <td></td> <td>1</td> <td>no waivers</td> </tr> </tbody> </table>	Studies with data					Data waiving	Other				1	no waivers	<p>⚠ No data available</p>	
Studies with data					Data waiving											
Other				1	no waivers											

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

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Note that the brief profile is an automatically generated summary and that not all available data may be displayed. The content is subject to change without prior notice. The information has not been reviewed or verified by ECHA or any other authority. The Agency thus cannot guarantee the correctness of the information displayed. The identification of applicable legislative frameworks is done automatically and without manual verification. Therefore this does not constitute official and legally binding information. To confirm if a substance is covered by a specific legislative framework the official publication should be consulted.

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8

Sensitisation

Study results: 7 studies submitted, 0 studies processed

Summary: 0 summaries submitted, 0 summaries processed

Study data: skin

⚠ No data available

⚠ Study data not processed for brief profile

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	1				no waivers
Supporting study	1				
Other	3				

Study data: respiratory

⚠ Study data not processed for brief profile

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	1				no waivers
Supporting study	1				
Other	3				

X

Repeated dose toxicity

Study results: 23 studies submitted, 1 study processed

Summary: 0 summaries submitted, 0 summaries processed

Study data: oral

⚠ No data available

P/R Results
NOAEL (rat): 75 mg/kg bw/day [1]

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	1				no waivers
Supporting study	3				
Other	19				

Study data: inhalation

11 studies submitted, 2 studies processed

P/R Results
NOAEC (rat): 75 ppm [1]
NOAEC (mouse): 75 ppm [1]

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	2				no waivers
Other	9				

Study data: dermal

1 study submitted, 0 studies processed

⚠ No automatically processable data submitted

Studies with data	⚠	📄	📊	🏠	Data waiving
Other	1				no waivers

X

Genetic toxicity

Study results: 29 studies submitted, 0 studies processed

Summary: 0 summaries submitted, 0 summaries processed

Study data: in vitro

⚠ No data available

⚠ Study data not processed for brief profile

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	3				no waivers
Supporting study	1				
Other	22			3	

Study data: in vivo

⚠ Study data not processed for brief profile

Studies with data	⚠	📄	📊	🏠	Data waiving
Key study	1				no waivers
Supporting study	1				
Other	8			3	

ANNEX XVII TO REACH – Conditions of restriction

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Entry 64

1,4-dichlorobenzene

CAS No 106-46-7

EC No 203-400-5

Conditions of restriction

Shall not be placed on the market or used, as a substance or as a constituent of mixtures in a concentration equal to or greater than 1 % by weight, where the substance or the mixture is placed on the market for use or used as an air freshener or deodoriser in toilets, homes, offices or other indoor public areas.

NON APPLICABILE A POLIMERI

