

Date of last issue: 09.03.2023	Version 6.1	Print Date 29.02.2024
Revision Date: 15.12.2023		

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Biresin[®] U1409 Part A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Tooling system

1.3 Details of the supplier of the safety data sheet

Company name of supplier	:	Sika Limited
		Watchmead Welwyn Garden City
		Hertfordshire. AL7 1BQ
Telephone	:	+44 (0)1707 394444
Telefax	:	+44 (0)1707 329129
E-mail address of person	:	EHS@uk.sika.com
responsible for the SDS		

1.4 Emergency telephone number

National Chemical Emergency Centre (NCEC) 24 Hour Emergency Telephone Number +44 870 190 6777

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1

H317: May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard, Category 2 H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms

Signal word	:	Warning			
Hazard statements	:	H317 H411	May cause an a Toxic to aquatic		

May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.



Date of last issue: 09.03.2023 Revision Date: 15.12.2023	Version 6.1		Print Date 29.02.2024
Precautionary statements :	Prevention: P261 P273 P280	Avoid breathing mist or vapours Avoid release to the environmer Wear protective gloves.	
	Response: P333 + P313 P362 + P364 P391	If skin irritation or rash occurs: G advice/ attention. Take off contaminated clothing a before reuse. Collect spillage.	

Hazardous components which must be listed on the label:

6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



Date of last issue: 09.03.2023 Revision Date: 15.12.2023 Version 6.1

Print Date 29.02.2024

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
6-methyl-2,4- bis(methylthio)phenylene-1,3- diamine	106264-79-3 403-240-8 01-0000015292-76- XXXX	Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Acute toxicity esti- mate Acute oral toxicity: 1.515 mg/kg	>= 20 - < 25
dioctyltin dilaurate	3648-18-8 222-883-3 01-2119979527-19- XXXX	Repr. 1B; H360D STOT RE 1; H372 (Immune system)	>= 0,1 - < 0,3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	:	Move to fresh air. Consult a physician after significant exposure.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
In case of eye contact	:	Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Do not induce vomiting without medical advice. Rinse mouth with water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.



Date of last issue: 09.03.2023	Version 6.1	Print Date 29.02.2024
Revision Date: 15.12.2023		

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	Allergic reactions See Section 11 for more detailed information on health effects and symptoms.
Risks	:	sensitising effects
		May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: Trea	at symptomatically.	
-----------	--------	---------------------	--

SECTION 5: Firefighting measures

5.1	Extinguishing media		
	Suitable extinguishing media	:	In case of fire, use water/water spray/water jet/carbon diox- ide/sand/foam/alcohol resistant foam/chemical powder for extinction.
5.2	Special hazards arising from	the	e substance or mixture
	Specific hazards during fire- fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
	Hazardous combustion prod- ucts	:	No hazardous combustion products are known
5.3	Advice for firefighters		
	Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.
	Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	: Use personal protective equipment. Deny access to unprotected persons.

6.2 Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system.
---------------------------	---	---



Date of last issue: 09.03.2023 Revision Date: 15.12.2023		Version 6.1	Print Date 29.02.2024
		If the product contaminates rivers and I respective authorities.	lakes or drains inform
6.3 Methods and material for c	ontai	nment and cleaning up	
Methods for cleaning up	:	Soak up with inert absorbent material (acid binder, universal binder, sawdust) Keep in suitable, closed containers for	
6.4 Reference to other sections	5	•	

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

	Advice on safe handling	:	Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asth- ma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the ap- plication area. Follow standard hygiene measures when handling chemical products
	Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
	Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
7.2	Conditions for safe storage, i	ncl	uding any incompatibilities
	Requirements for storage areas and containers	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re- sealed and kept upright to prevent leakage. Store in accord- ance with local regulations.
	Further information on stor- age stability	:	No decomposition if stored and applied as directed.
7.3	Specific end use(s)		
	Specific use(s)	:	Consult most current local Product Data Sheet prior to any



Date of last issue: 09.03.2023	Version 6.1	Print Date 29.02.2024
Revision Date: 15.12.2023		

use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters *	Basis *
dioctyltin dilaurate	3648-18-8	TWA	0,1 mg/m3 (Tin)	GB EH40
	signed substa	nation: Can be abso nces are those for v ption will lead to sys	which there are co	
		STEL	0,2 mg/m3 (Tin)	GB EH40

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	:	Safety glasses with side-shields conforming to EN166 Eye wash bottle with pure water
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
		Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves (> 0,1 mm) Contaminated gloves should be removed. Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.
Skin and body protection	:	Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionaly recommended for mixing and stirring work.
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe work- ing limits of the selected respirator. organic vapor filter (Type A)
untry CD 00000122440		C / 1



Version 6.1	Print Date 29.02.2024
A1: < 1000 ppm; A2: < 5000 ppm; A3: Ensure adequate ventilation. This can l exhaust extraction or by general ventila ods for determining inhalation exposure ticular to the mixing / stirring area. In ca to keep the concentrations under the o limits then respiration protection measu	be achieved by local ation. (EN 689 - Meth- e). This applies in par- ase this is not sufficent ccupational exposure
controls	
: Do not flush into surface water or sanit If the product contaminates rivers and respective authorities.	
	 A1: < 1000 ppm; A2: < 5000 ppm; A3: Ensure adequate ventilation. This can exhaust extraction or by general ventila ods for determining inhalation exposure ticular to the mixing / stirring area. In ca to keep the concentrations under the o limits then respiration protection measu controls Do not flush into surface water or sanit If the product contaminates rivers and

9.1 Information on basic physical and chemical properties

Physical state Colour	:	liquid beige
Odour	:	characteristic
Melting point/range / Freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	No data available
Upper/lower flammability or (exp	losive limits
Upper/lower flammability or o Upper explosion limit / Up- per flammability limit	•	
Upper explosion limit / Up-	•	No data available
Upper explosion limit / Upper flammability limit	:	No data available No data available
Upper explosion limit / Up- per flammability limit Lower explosion limit / Lower flammability limit	:	No data available No data available > 101 °C Method: closed cup

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Biresin® U1409 Part A

Date of last issue: 09.03.2023 Revision Date: 15.12.2023	Version 6.1	Print Date 29.02.2024
рН	: ca. 7 - 8 (20 °C) Concentration: 50 % Not applicable substance/mixture is non-soluble (in water)	
Viscosity		
Viscosity, dynamic	: ca. 1.400 mPa.s (25 °C)	
Viscosity, kinematic	: > 20,5 mm2/s (40 °C)	
Solubility(ies)		
Water solubility	: insoluble	
Partition coefficient: n- octanol/water	: No data available	
Vapour pressure	: 0,01 hPa	
Density	: ca. 1,09 g/cm3 (20 °C)	
Relative vapour density	: No data available	
Particle characteristics	: No data available	

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions :		Stable under recommended storage conditions.
-----------------------	--	--

10.4 Conditions to avoid

Conditions to avoid : No data available



Date of last issue: 09.03.2023 Revision Date: 15.12.2023	Version 6.1	Print Date 29.02.2024

10.5 Incompatible materials

Materials to avoid

: No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

Components:

6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine:

Acute oral toxicity

: LD50 Oral (Rat): 1.515 mg/kg

Acute toxicity estimate: 1.515 mg/kg Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.



Date of last issue: 09.03.2023 Revision Date: 15.12.2023 Version 6.1

Print Date 29.02.2024

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor- : An environmental hazard cannot be excluded in the event of



Date of last issue: 09.03.2023 Revision Date: 15.12.2023	Version 6.1	Print Date 29.02.2024
mation	unprofessional handling or disposal. Toxic to aquatic life with long lasting effe	cts.
SECTION 13: Disposal consid	derations	
13.1 Waste treatment methods		
Product	 The generation of waste should be avoid wherever possible. Empty containers or liners may retain son This material and its container must be d way. Dispose of surplus and non-recyclable prevented waste disposal contractor. Disposal of this product, solutions and are at all times comply with the requirements protection and waste disposal legislation local authority requirements. Avoid dispersal of spilled material and ru 	me product residues. lisposed of in a safe roducts via a licensed ny by-products should s of environmental and any regional

soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1 UN number or ID number				
ADR	:	UN 3082		
IMDG	:	UN 3082		
ΙΑΤΑ	:	UN 3082		
14.2 UN proper shipping name				
ADR	:	N.O.S.	Y HAZARDOUS SUBSTANCE, LIQUID, thylthio)phenylene-1,3-diamine)	
IMDG	:	N.O.S.	Y HAZARDOUS SUBSTANCE, LIQUID, thylthio)phenylene-1,3-diamine)	
ΙΑΤΑ	:	Environmentally hazardous substance, liquid, n.o.s. (6-methyl-2,4-bis(methylthio)phenylene-1,3-diamine)		
14.3 Transport hazard class(es)				
		Class	Subsidiary risks	
ADR	:	9		
IMDG	:	9		
ΙΑΤΑ	:	9		



Date of last issue: 09.03.2023	Version 6.1	Print Date 29.02.2024
Revision Date: 15.12.2023		

14.4 Packing group

ADR Packing group Classification Code Hazard Identification Number Labels Tunnel restriction code	:	III M6 90 9 (-)
IMDG Packing group Labels EmS Code		III 9 F-A, S-F
IATA (Cargo) Packing instruction (cargo aircraft) Packing instruction (LQ) Packing group Labels	:	964 Y964 III Miscellaneous
IATA (Passenger) Packing instruction (passen- ger aircraft) Packing instruction (LQ) Packing group Labels		964 Y964 III Miscellaneous
5 Environmental hazards		

14.5 Environmental hazards

ADR Environmentally hazardous	:	yes
IMDG Marine pollutant	:	yes
IATA (Passenger) Environmentally hazardous	:	yes
IATA (Cargo)		

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.



Date of last issue: 09.03.2023	Version 6.1	Print Date 29.02.2024
Revision Date: 15.12.2023		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant EU provisions transposed through retained EU law

	UK REACH List of restrictions (Annex 17)	:	Not applicable
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation			Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)			Not applicable
	International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable
	Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
	UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
	GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable
	Control of Major Accident Hazards Regulations E2 2015 (COMAH)	EN	VIRONMENTAL HAZARDS
		tax fo	or volatile organic compounds
	emissions (integrated	d poll	4 November 2010 on industrial ution prevention and control) ds (VOC) content: < 0% w/w
If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.			
			Act 1990 & Subsidiary Regulations

Health, safety and environ-	: Environmental Protection Act 1990 & Subsidiary Regulations
mental regulation/legislation	Health and Safety at Work Act 1974 & Subsidiary Regulations
specific for the substance or	Control of Substances Hazardous to Health Regulations
mixture:	(COSHH)



Date of last issue: 09.03.2023 Revision Date: 15.12.2023 Version 6.1

Print Date 29.02.2024

May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

H302:Harmful if swallowed.H317:May cause an allergic skin reaction.H360D:May damage the unborn child.H372:Causes damage to organs through prolonged or repeated exposure.H400:Very toxic to aquatic life.H410:Very toxic to aquatic life with long lasting effects.Full text of other abbreviationsAcute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Full text of H-Statements		
H360D:May damage the unborn child.H372:Causes damage to organs through prolonged or repeated exposure.H400:Very toxic to aquatic life.H410:Very toxic to aquatic life with long lasting effects.Full text of other abbreviationsAcute Tox.:Aquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Skin Sens.:Stin Sens.:Stel H40:UK. EH40 WEL - Workplace ExposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:CAS:DNEL:Derived no-effect levelEC50:H41 maximal effective concentrationGHS:Globally Harmonized SystemIATA:INTAIATA:INTAINTAINTAINTAINTAINTAINTEString and the than at international Air Transport AssociationIMDGINTAINTAINTERINTAINTERINTER <td></td> <td>:</td> <td></td>		:	
H372:Causes damage to organs through prolonged or repeated exposure.H400:Very toxic to aquatic life.H410:Very toxic to aquatic life with long lasting effects.Full text of other abbreviationsAcute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:Long-term exposure limit (15-minute reference period)ADR:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
exposure.H400:Very toxic to aquatic life.H410:Very toxic to aquatic life with long lasting effects.Full text of other abbreviationsAcute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
H410:Very toxic to aquatic life with long lasting effects.Full text of other abbreviationsAcute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	H372	:	
Full text of other abbreviationsAcute Tox.:Acute toxicityAquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	H400	:	Very toxic to aquatic life.
Acute Tox.: Acute toxicityAquatic Acute: Short-term (acute) aquatic hazardAquatic Chronic: Long-term (chronic) aquatic hazardRepr.: Reproductive toxicitySkin Sens.: Skin sensitisationSTOT RE: Specific target organ toxicity - repeated exposureGB EH40: UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA: Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL: Short-term exposure limit (15-minute reference period)ADR: European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS: Chemical Abstracts ServiceDNEL: Derived no-effect levelEC50: Half maximal effective concentrationGHS: Globally Harmonized SystemIATA: International Air Transport AssociationIMDG: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	H410	:	Very toxic to aquatic life with long lasting effects.
Aquatic Acute:Short-term (acute) aquatic hazardAquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Full text of other abbreviation	าร	
Aquatic Chronic:Long-term (chronic) aquatic hazardRepr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Acute Tox.	:	Acute toxicity
Repr.:Reproductive toxicitySkin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Aquatic Acute	:	Short-term (acute) aquatic hazard
Skin Sens.:Skin sensitisationSTOT RE:Specific target organ toxicity - repeated exposureGB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Aquatic Chronic	:	
STOT RE GB EH40: Specific target organ toxicity - repeated exposure UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA: Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL: Short-term exposure limit (15-minute reference period)ADR: European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS: Chemical Abstracts ServiceDNEL: Derived no-effect levelEC50: Half maximal effective concentrationGHS: Globally Harmonized SystemIATA: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	Repr.	:	
GB EH40:UK. EH40 WEL - Workplace Exposure LimitsGB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
GB EH40 / TWA:Long-term exposure limit (8-hour TWA reference period)GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
GB EH40 / STEL:Short-term exposure limit (15-minute reference period)ADR:European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
ADR: European Agreement concerning the International Carriage of Dangerous Goods by RoadCAS: Chemical Abstracts ServiceDNEL: Derived no-effect levelEC50: Half maximal effective concentrationGHS: Globally Harmonized SystemIATA: International Air Transport AssociationIMDG: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
Dangerous Goods by RoadCAS: Chemical Abstracts ServiceDNEL: Derived no-effect levelEC50: Half maximal effective concentrationGHS: Globally Harmonized SystemIATA: International Air Transport AssociationIMDG: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
CAS:Chemical Abstracts ServiceDNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)	ADR	:	
DNEL:Derived no-effect levelEC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)			
EC50:Half maximal effective concentrationGHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
GHS:Globally Harmonized SystemIATA:International Air Transport AssociationIMDG:International Maritime Code for Dangerous GoodsLD50:Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
IATA: International Air Transport AssociationIMDG: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
IMDG: International Maritime Code for Dangerous GoodsLD50: Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
LD50 : Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)		:	
once, which causes the death of 50% (one half) of a group of test animals)		:	
	LD50	:	once, which causes the death of 50% (one half) of a group of
LUSU : Median lethal concentration (concentrations of the chemical in	LC50	:	Median lethal concentration (concentrations of the chemical in



Date of last issue: 09.03.2023 Revision Date: 15.12.2023		Version 6.1	Print Date 29.02.2024	
MARPOL	:	air that kills 50% of the test animals during th period) International Convention for the Prevention o Ships, 1973 as modified by the Protocol of 19	of Pollution from	
OEL PBT PNEC REACH	:	 Occupational Exposure Limit Persistent, bioaccumulative and toxic Predicted no effect concentration Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Reg- istration, Evaluation, Authorisation and Restriction of Chemi- cals (REACH), establishing a European Chemicals Agency Substances of Very High Concern Very persistent and very bioaccumulative 		
SVHC vPvB	:			
Further information				
Classification of the mixture:		Classification proc	edure:	
Skin Sens. 1	H3	17 Calculation method		

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Calculation method

Changes as compared to previous version !

H411

GB / EN

Aquatic Chronic 2