


**SAFETY DATA SHEET**

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PanelBond ADHESIVE

824074

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 758) as amended - SDSGHS\_GB

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1 Product identifier**

Trade name : PanelBond  
ADHESIVE

UFI: 9M91-50QE-R00D-KG6M

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

Recommended use : Adhesives

**1.3 Details of the supplier of the safety data sheet**

Wayside Adhesives Ltd  
23 Main Road  
Radcliffe on Trent  
Nottingham  
NG12 2BE

Tel: 01159 33 33 21

info@waysideadhesives.com

**1.4 Emergency telephone number**

01159 33 33 21

**SECTION 2: Hazards identification**
**2.1 Classification of the substance or mixture**
**Classification (REGULATION (EC) No 1272/2008)**

Skin irritation, Category 2

H315: Causes skin irritation.

Eye irritation, Category 2

H319: Causes serious eye irritation.

Skin sensitisation, Category 1

H317: May cause an allergic skin reaction.

Specific target organ toxicity - repeated exposure, Category 2

H373: May cause damage to organs through prolonged or repeated exposure

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 : H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.

#### Prevention:

P260 Do not breathe mist or vapours.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.

#### Response:

P391 Collect spillage.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Hazardous components which must be listed on the label:

bis-[4-(2,3-epoxypropoxy)phenyl]propane  
1,4-bis[(2,3-Epoxypropoxy)ethyl]cyclohexane

### Additional Labelling

EUH205 Contains epoxy constituents. May produce an allergic reaction.

### 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.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3 216-823-5 603-073-00-2 01-2119456619-26-xxxx	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411  specific concentration limit Eye Irrit. 2; H319 >= 5 % Skin Irrit. 2; H315 >= 5 %	>= 50 - < 60
1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane	14228-73-0 238-098-4	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 3; H412	>= 10 - < 15
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8 219-784-2 01-2119513212-58-XXXX	Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 1 - < 2,5
cristobalite	14464-46-1 238-455-4 Exempt	STOT RE 1; H372 (Respiratory system, Kidney)	>= 0,1 - < 0,5
Substances with a workplace exposure limit :			
Silica, vitreous	60676-86-0 262-373-8		>= 15 - < 25

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Move out of dangerous area.  
Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Obtain medical attention.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or Section 11.
- Risks : Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause cancer.  
May cause damage to organs through prolonged or repeated exposure.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.  
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Hydrocarbons  
phenols  
Formaldehyde  
Methanol  
Silicon oxides

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.  
Comply with all applicable federal, state, and local regulations.

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.  
Do not smoke.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Container hazardous when empty.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.

Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When using do not eat or drink. When using do not smoke.

### 7.2 Conditions for safe storage, including 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 resealed and kept upright to prevent leakage. Observe label precautions.

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : No data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Silica, vitreous	60676-86-0	TWA (Respirable dust)	0,08 mg/m <sup>3</sup> Respirable dust	GB EH40
crystalite	14464-46-1	TWA (Respirable fraction)	0,1 mg/m <sup>3</sup> Respirable fraction (Silica)	GB EH40

### 8.2 Exposure controls

#### Engineering measures

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

#### Personal protective equipment

Eye protection	: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
Hand protection	
Material	: butyl-rubber
Break through time	: 480 min
Glove thickness	: > 0,5 mm
Remarks	: The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Skin and body protection	: Wear as appropriate: Impervious clothing Safety shoes Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear.
Respiratory protection	: In the case of vapour formation use a respirator with an approved filter within the capabilities of the respirator/filter combination. Where concentrations are above recommended limits or are unknown, or a cartridge type respirator is not adequate, wear a positive-pressure supplied-air respirator.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	: viscous
	liquid
Colour	: black
Odour	: mild
Odour Threshold	: No data available



pH	:	No data available
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	> 150 °C
Flash point	:	> 99 °C Method: Seta closed cup
Evaporation rate	:	not determined
Upper explosion limit / Upper flammability limit	:	Upper explosion limit not determined
Lower explosion limit / Lower flammability limit	:	Lower explosion limit not determined
Vapour pressure	:	< 0,1 hPa (20 °C)
Relative vapour density	:	not determined
Relative density	:	1,089 (20 °C)
Density	:	1,089 g/cm <sup>3</sup> (20 °C)
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	not determined
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	> 10000 mm <sup>2</sup> /s (40 °C)
Oxidizing properties	:	Not applicable

## 9.2 Other information

Self-ignition : not determined

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

### 10.4 Conditions to avoid

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.  
Exposure to air.  
Exposure to moisture

### 10.5 Incompatible materials

Materials to avoid : Acids  
Amines  
Bases  
fluorides  
Oxidizing agents  
peroxides  
water

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)  
Hydrocarbons  
Acetone  
hydrogen bromide

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Information on likely routes of : Inhalation

exposure

Skin contact  
Eye contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg  
Method: OECD Test Guideline 420  
Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

**Components:**

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Acute oral toxicity : LD50 (Rat): 8.025 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5,3 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 4.250 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Result: Slight, transient irritation

1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane

Result: Irritating to skin.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Result: Slight, transient irritation

cristobalite  
Result: Slight, transient irritation

Silica, vitreous  
Result: Slight, transient irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

**Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Result: Slight, transient irritation

1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane

Result: Irritating to eyes.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Result: Irreversible effects on the eye

cristobalite  
Result: Slight, transient irritation

Silica, vitreous  
Result: Slight, transient irritation

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**Product:**

Remarks: May cause allergic skin reaction.

**Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Test Type: Local lymph node assay

Assessment: The product is a skin sensitiser, sub-category 1B.

Method: OECD Test Guideline 429

1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane

Assessment: May cause sensitisation by skin contact.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Species: Guinea pig

Assessment: Did not cause sensitisation on laboratory animals.

### **Germ cell mutagenicity**

Not classified based on available information.

#### **Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Genotoxicity in vitro : Test Type: in vitro assay  
Test species: Rodent cell line  
Metabolic activation: without metabolic activation  
Result: positive

: Test Type: in vitro assay  
Test species: Rodent cell line  
Metabolic activation: with metabolic activation  
Result: negative

: Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay  
Test species: Mouse (male)  
Application Route: Ingestion  
Result: negative

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Genotoxicity in vitro : Test Type: Ames test  
Test species: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
Result: positive

: Test species: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: positive

: Test species: Chinese hamster ovary cells  
Method: OECD Test Guideline 479  
Result: positive

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Test species: Mouse (male and female)  
Cell type: Bone marrow

Application Route: Intraperitoneal  
Method: OECD Test Guideline 474  
Result: positive

**Carcinogenicity**

May cause cancer.

**Components:**

crystalite

Carcinogenicity - : Human carcinogen.

Assessment

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Components:**

crystalite

Exposure routes: inhalation (dust/mist/fume)

Target Organs: Respiratory system, Kidney

Assessment: Causes damage to organs through prolonged or repeated exposure.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Further information**

**Product:**

Remarks: No data available

**Components:**

crystalite

Remarks: Lung

Silica, vitreous

Remarks: Lung

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### **Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,7 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,8 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 4,2 mg/l  
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,3 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Test Type: semi-static test  
Method: OECD Test Guideline 211

Ecotoxicology Assessment Short-term (acute) aquatic hazard : Acute aquatic toxicity Category 2; Toxic to aquatic life.

Long-term (chronic) aquatic hazard : Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.

1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane

Ecotoxicology Assessment

Long-term (chronic) aquatic hazard : Harmful to aquatic life with long lasting effects.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 55 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 324 mg/l

aquatic invertebrates	Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (microalgae)): 350 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 100 mg/l Exposure time: 21 d Species: Daphnia (water flea)

## 12.2 Persistence and degradability

### Components:

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
 Biodegradability : Result: Not readily biodegradable.  
 Biodegradation: 5 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

Biodegradation: 82 %  
 Exposure time: 28 d  
 Method: Abiotic degradation

Physico-chemical removability : Remarks: The product can be degraded by abiotic (e.g. chemical or photolytic) processes.

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane  
 Biodegradability : Test Type: aerobic  
 Result: Not readily biodegradable.  
 Biodegradation: 37 %  
 Exposure time: 28 d  
 GLP: yes

## 12.3 Bioaccumulative potential

### Components:

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane  
 Partition coefficient: n-octanol/water : log Pow: Estimated 0,5 (20 °C)



#### 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 Other adverse effects

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

**Components:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane  
Additional ecological information : Toxic to aquatic life with long lasting effects.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

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## SECTION 14: Transport information

### SECTION 14: Transport information

#### 14.1 UN number

**ADN:** UN3082

**ADR:** UN3082

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:** UN3082

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:** UN3082

**INTERNATIONAL MARITIME DANGEROUS GOODS:** UN3082

**RID:** UN3082

#### 14.2 UN proper shipping name

**ADN:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**ADR:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:** Environmentally hazardous substance, liquid, n.o.s. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:** Environmentally hazardous substance, liquid, n.o.s. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**INTERNATIONAL MARITIME DANGEROUS GOODS:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

**RID:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-EPICHLOROHYDRIN POLYMER)

#### 14.3 Transport hazard class(es)

**ADN:** 9

**ADR:** 9

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:** 9

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:** 9

**INTERNATIONAL MARITIME DANGEROUS GOODS:** 9

**RID:** 9

#### 14.4 Packing group

**ADN:** III

**ADR:** III

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:** III

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:** III

**INTERNATIONAL MARITIME DANGEROUS GOODS: III**  
**RID: III**

#### 14.5 Environmental hazards

**ADN:** Environmentally hazardous  
**ADR:** Environmentally hazardous  
**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO:** Environmentally hazardous  
**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER:** Environmentally hazardous  
**INTERNATIONAL MARITIME DANGEROUS GOODS:** Environmentally hazardous  
**RID:** Environmentally hazardous

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable  
Hazard code(s): Not applicable  
Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

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### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

UK REACH List of substances subject to authorisation : Not applicable  
(Annex XIV)

**The components of this product are reported in the following inventories:**

TCSI : Not in compliance with the inventory

TSCA All substances listed as active on the TSCA inventory

AIIC On the inventory, or in compliance with the inventory

DSL All components of this product are on the Canadian DSL

ENCS	Not in compliance with the inventory
ISHL	Not in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
NZIoC	Not in compliance with the inventory

#### **Inventories**

AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

#### **15.2 Chemical safety assessment**

No data available

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### **SECTION 16: Other information**

#### **Full text of H-Statements**

H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H372	:	Causes damage to organs through prolonged or repeated exposure if inhaled.
H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

#### **Full text of other abbreviations**

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation

Skin Sens. : Skin sensitisation  
STOT RE : Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal data including own and sponsored test reports  
European Union Law with content from the Official Journal of the European Union.  
European Chemicals Agency; the EU authority implementing

the EU's chemicals legislation for companies.  
The German Water Hazard Classes.  
ReachCentrum; a series of support services to help comply with REACH regulations.  
The European Commission; proposing legislation, administering and implementing EU policies, and enforcing EU law.  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.  
Cefic, the European Chemical Industry Council.  
ESIS European Chemical Substances Information System

**Classification of the mixture:**

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Aquatic Chronic 2	H411

**Classification procedure:**

Calculation method
Calculation method
Calculation method
Calculation method

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