



SAFETY DATA SHEET

IRS2013 RESIN

According to Regulation (EC) No 1907/2006, Annex II, as amended. COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name IRS2013 RESIN

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

Identified uses Resin.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Intertronics
Unit 12a
Station Field Industrial Estate
Banbury Road
Kidlington
Oxfordshire, OX5 1JD
+44 (0)1865842842

1.4. Emergency telephone number

Emergency telephone +44 (0)1285 712755 (Monday-Friday 8am-4.30pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH205 Contains epoxy constituents. May produce an allergic reaction. EUH210 Safety data sheet available on request.
Contains	Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl)], bis-[4-(2,3-epoxipropoxy)phenyl]propane
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro-omega-hydroxypoly [oxy(methyl-1,2-ethanediyl)]			50-70%
CAS number: 9072-62-2			
Classification			
Skin Sens. 1 - H317			
bis-[4-(2,3-epoxipropoxy)phenyl]propane			30-50%
CAS number: 1675-54-3	EC number: 216-823-5	REACH registration number: 01-2119456619-26-XXXX	
Classification			
Acute Tox. 4 - H302			
Skin Irrit. 2 - H315			
Eye Irrit. 2 - H319			
Skin Sens. 1 - H317			
Aquatic Chronic 2 - H411			
Aluminium oxide			1-5%
CAS number: 1344-28-1			
Classification			
Not Classified			

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Silicon dioxide, chemically prepared	1-5%
CAS number: 112945-52-5	

Classification
Not Classified

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine	<0.5%
CAS number: 4197-25-5	EC number: 224-087-1

Classification
Muta. 2 - H341

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Remove any dentures. Induce vomiting if directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin contact	Remove contamination with soap and water or recognised skin cleansing agent. Remove contaminated clothing. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause sensitisation or allergic reactions in sensitive individuals.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
Eye contact	Irritating to eyes.

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

Notes for the doctor Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Phenolics. Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Immiscible with water. Avoid release to the environment. Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

6.4. Reference to other sections

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Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Persons susceptible to allergic reactions should not handle this product. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Product may crystallise or separate if exposed to cold temperatures for extended periods of time. If this occurs, the product should be warmed to 38-60°C for one hour. If the product is in a bulk form stir until clear.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl]

No exposure limits known for ingredient(s).

bis-[4-(2,3-epoxipropoxy)phenyl]propane

No exposure limits known for ingredient(s).

Aluminium oxide

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Silicon dioxide, chemically prepared

Long-term exposure limit (8-hour TWA): WEL 6 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 2.4 mg/m³ respirable dust

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

No exposure limits known for ingredient(s).

WEL = Workplace Exposure Limit.

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bis-[4-(2,3-epoxipropoxy)phenyl]propane (CAS: 1675-54-3)

DNEL

General population - Oral; Long term systemic effects: 0.75 mg/kg, bw/day
 General population - Dermal; Long term, Short term systemic effects: 3.571 mg/kg, bw/day
 Workers - Dermal; Short term, Long term systemic effects: 8.33 mg/kg, bw/day
 Workers - Inhalation; Short term, Long term systemic effects: 12.25 mg/m³

PNEC

Fresh water; 0.006 mg/l
 marine water; 0.0006 mg/l
 Intermittent release; 0.018 mg/l
 Sediment (Freshwater); 0.996 mg/kg
 Sediment (Marinewater); 0.0996 mg/kg
 Soil; 0.196 mg/kg
 STP; 10 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. Gloves made from the following material may provide suitable chemical protection: Butyl rubber. Nitrile rubber. Neoprene. Rubber (natural, latex). Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. The breakthrough time for any glove material may be different for different glove manufacturers. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Provide eyewash station. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

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Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Dark. Blue.
Odour	Mild.
Initial boiling point and range	>200°C Estimated value.
Flash point	> 180°C Closed cup. Estimated value.
Relative density	1.21
Solubility(ies)	Insoluble in water.
Decomposition Temperature	>160°C

9.2. Other information

Other information	No information required.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	See the other subsections of this section for further details.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	Static electricity and formation of sparks must be prevented.
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10.5. Incompatible materials

Materials to avoid	Strong alkalis. Oxidising materials. Strong acids. Amines.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Phenolics. Oxides of carbon.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD ₅₀)	Based on available data the classification criteria are not met.
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ATE oral (mg/kg)	1,314.41
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Acute toxicity - dermal

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Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause skin sensitisation or allergic reactions in sensitive individuals.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
<u>General information</u>	
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause stomach pain or vomiting. May cause discomfort.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Irritating to skin.
Eye contact	Irritating to eyes.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.
<u>Toxicological information on ingredients.</u>	

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Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl)]

Acute toxicity - oral

Notes (oral LD₅₀) >3,500 mg/kg, Oral, Rat

Germ cell mutagenicity

Genotoxicity - in vitro Positive.

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Acute toxicity - oral

Notes (oral LD₅₀) >1,500 mg/kg, Oral, Mouse

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) 23032 mg/kg, Dermal, Rabbit

Aluminium oxide

Acute toxicity - oral

Notes (oral LD₅₀) >10,000 mg/kg, Oral, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >2.3 mg/l/4hr/day, Inhalation, Rat

Silicon dioxide, chemically prepared

Acute toxicity - oral

Notes (oral LD₅₀) >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) >5,000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC0 0.139 mg/l/4hr/day, Inhalation, Rat Inconclusive data.

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Toxicological effects Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary Suspected of causing genetic defects.

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Aquatic Chronic 2 - H411 Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2 mg/l, Fish
Estimated value.

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Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 1.8 mg/l, Daphnia magna Estimated value.
Acute toxicity - aquatic plants	LC ₅₀ , 72 hours: 11 mg/l, Scenedesmus subspicatus Estimated value.

Ecological information on ingredients.

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl)]

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: >320 mg/l, Daphnia magna
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: >100 mg/l, Bacteria

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 2 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.8 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 11 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	IC ₅₀ , 3 hours: >100 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.3 mg/l, Daphnia magna
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Aluminium oxide

Toxicity	No data available.
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Silicon dioxide, chemically prepared

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >10,000 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: >1,000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 10,000 mg/l, Desmodesmus subspicatus

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Toxicity	No data available.
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12.2. Persistence and degradability

Persistence and degradability Not readily biodegradable.

Ecological information on ingredients.

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Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl]

Persistence and degradability No data available.

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Persistence and degradability Not readily biodegradable.

Stability (hydrolysis) pH4 - DT₅₀ : 4.83 days @ 25°C
pH7 - DT₅₀ : 3.58 days @ 25°C
pH9 - DT₅₀ : 7.1 days @ 25°C

Aluminium oxide

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

Silicon dioxide, chemically prepared

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl]

Bioaccumulative potential No data available on bioaccumulation.

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 3.242 (25°C)

Aluminium oxide

Bioaccumulative potential No data available on bioaccumulation.

Silicon dioxide, chemically prepared

Bioaccumulative potential Bioaccumulation is unlikely.

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

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Mobility The product is insoluble in water. The product is non-volatile.

Ecological information on ingredients.

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl]

Mobility No data available.

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Adsorption/desorption coefficient - Koc: 445 @ 20°C

Aluminium oxide

Mobility No data available.

Silicon dioxide, chemically prepared

Mobility Not considered mobile.

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Oxirane, 2-(chloromethyl)-, polymer with alpha-hydro- omega-hydroxypoly [oxy(methyl-1,2-ethanediyl]

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

bis-[4-(2,3-epoxipropoxy)phenyl]propane

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Aluminium oxide

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Silicon dioxide, chemically prepared

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2,3-dihydro-2,2-dimethyl-6-[[1-naphthyl-4-(phenylazo)]azo]-1H-perimidine

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

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Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

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Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). COMMISSION REGULATION (EU) 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

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Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). EC₅₀: 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Classification procedures according to Regulation (EC) 1272/2008	Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: Skin Sens. 1 - H317: : Calculation method. Aquatic Chronic 2 - H411: : Calculation method.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision date	12/06/2020
Revision	8
Supersedes date	12/04/2018
SDS number	5167
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.