



West & Senior Limited

Milltown Street • Radcliffe • Manchester • M26 1WE • United Kingdom

Tel +44 (0) 161 724 7131 • Fax +44 (0) 161 724 9519

<http://www.westsenior.co.uk> • info@westsenior.co.uk

SAFETY DATA SHEET IVORY RAL1014 EPOXY PIGMENT

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

1.1. Product identifier

Product name IVORY RAL1014 EPOXY PIGMENT

Product number WS27415C

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

Identified uses COLOURING OF EPOXIDE COMPOUNDS & SYSTEMS

1.3. Details of the supplier of the safety data sheet

Supplier WEST AND SENIOR LIMITED.
MILLTOWN STREET
RADCLIFFE
MANCHESTER. M26 1WE.
TEL + 44 01617247131
FAX + 44 01617249519
info@westsenior.co.uk

1.4. Emergency telephone number

Emergency telephone 24 HOUR EMERGENCY TELEPHONE NUMBER : + 44 (0) 7930 595916

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Human health See Section 11 for additional information on health hazards.

Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements
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.

IVORY RAL1014 EPOXY PIGMENT

Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
---------------------------------	---

Supplemental label information EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700, oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

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

TITANIUM DIOXIDE	30-60%
CAS number: 13463-67-7	EC number: 236-675-5
	REACH registration number: 01-2119489379-17-0000
Classification	
Not Classified	
bis-[4-(2,3-epoxipropoxy)phenyl]propane	30-60%
CAS number: 1675-54-3	EC number: 216-823-5
	REACH registration number: 01-2119456619-26
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	

IVORY RAL1014 EPOXY PIGMENT

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700	10-30%
CAS number: 9003-36-5	EC number: 500-006-8
	REACH registration number: 01-2119454392-40-0000
Classification	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	5-10%
CAS number: 68609-97-2	REACH registration number: 01-2119485289-22-0000
Classification	
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
C.I. PIGMENT YELLOW 42	1-5%
CAS number: 51274-00-1	EC number: 257-098-5
	REACH registration number: 01-2119457554-33-0000
Classification	
Not Classified	
BARIUM SULPHATE	1-5%
CAS number: 7727-43-7	EC number: 231-784-4
	REACH registration number: 01-2119491274-35-0001
Classification	
Not Classified	
Trimethylolpropane	<1%
CAS number: 77-99-6	EC number: 201-074-9
	REACH registration number: 01-2119486799-10-XXXX
Classification	
Repr. 2 - H361fd	
CARBON BLACK	<1%
CAS number: 1333-86-4	EC number: 215-609-9
	REACH registration number: 01-2119384822-32-0000
Classification	
Not Classified	

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

Composition comments

This mixture contains $\geq 1\%$ Titanium Dioxide (CAS 13463-67-7) The Annex VI classification of Titanium Dioxide does not apply to this mixture according to its Note 10.

IVORY RAL1014 EPOXY PIGMENT

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Give milk instead of water if readily available. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention promptly if symptoms occur after washing.

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

Inhalation	Vapours may irritate throat/respiratory system.
Ingestion	There may be soreness and redness of the mouth and throat.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor	No specific recommendations. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Specific treatments	Provide eyewash station.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Not known.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Fire or high temperatures create: Toxic gases or vapours. Carbon dioxide (CO ₂). Carbon monoxide (CO). Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide (CO). Halogenated hydrocarbons.

5.3. Advice for firefighters

Protective actions during firefighting	Isolate area. Very toxic to aquatic life. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

IVORY RAL1014 EPOXY PIGMENT

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation of vapours. Isolate area.

6.2. Environmental precautions

Environmental precautions Avoid 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 Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Do not eat, drink or smoke when using this product. Persons susceptible to allergic reactions should not handle this product.
Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists.
Store in tightly-closed, original container. Wear suitable protective clothing as protection against splashing or contamination.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Chemical 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

TITANIUM DIOXIDE

EH40 WEL, Time Weighted Average (TWA):, Inhalable dust. 10 mg/m³, 8 h

EH40 WEL, Time Weighted Average (TWA):, Respirable dust. 4 mg/m³, 8 h

C.I. PIGMENT YELLOW 42

Long-term exposure limit (8-hour TWA): 5 mg/m³, Iron. fume

Short-term exposure limit (15-minute): 10 mg/m³, Iron. fume

BARIUM SULPHATE

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

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

CARBON BLACK

IVORY RAL1014 EPOXY PIGMENT

Argentina 3.5, TWA
 Australia 3.0, TWA, inhalable
 Belgium 3.6, TWA
 Brazil 3.5, TWA
 Canada (Ontario) 3.0 TWA, inhalable
 China 4.0, TWA 8.0, TWA, STEL (15 min)
 Colombia 3.0, TWA, inhalable
 Czech Republic 2.0, TWA
 Egypt 3.5, TWA
 Finland 3.5, TWA; 7.0, STEL
 France – INRS 3.5, TWA/VME inhalable
 Germany – BeKGS527 0.5, TWA, respirable; 2.0, TWA, inhalable (DNEL values)
 Hong Kong 3.5, TWA
 Indonesia 3.5, TWA/NABs
 Ireland 3.5, TWA; 7.0, STEL
 Italy 3.5, TWA, inhalable
 Japan – MHLW 3.0
 Japan – SOH 4.0, TWA; 1.0, TWA, respirable
 Korea 3.5, TWA
 Malaysia 3.5, TWA
 Mexico 3.5, TWA
 Russia 4.0, TWA
 Spain 3.5, TWA (VLA-ED)
 Sweden 3.0, TWA
 United Kingdom 3.5, TWA, inhalable; 7.0, STEL, inhalable
 EU REACH DNEL 2.0, TWA, inhalable; 0.5, TWA respirable
 United States 3.5, TWA, OSHA-PEL
 3.0, TWA, ACGIH-TLV®, inhalable
 3.5, TWA, NIOSH-REL

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL	Workers - Inhalation; Long term local effects: 10 mg/m ³ Professional - Inhalation; Long term local effects: 10 mg/m ³ Consumer - Oral; Long term systemic effects: 700 mg/kg/day
PNEC	marine water; 0.0184 mg/l Fresh water; 0.184 mg/l Intermittent release; 0.193 mg/l STP; 100 mg/l Sediment, marine water; 100 mg/kg Sediment, Fresh water; 1000 mg/kg Soil; 100 mg/kg

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

IVORY RAL1014 EPOXY PIGMENT

DNEL	Workers - Dermal; Short term systemic effects: 8.3 mg/kg, bw/day
	Workers - Inhalation; Short term systemic effects: 12.3 mg/m ³
	Workers - Dermal; Long term systemic effects: 8.3 mg/kg, bw/day
	Workers - Inhalation; Long term systemic effects: 12.3 mg/m ³
	General population - Dermal; Short term systemic effects: 3.6 mg/kg, bw/day
	General population - Inhalation; Short term systemic effects: 0.75 mg/m ³
	General population - Oral; Short term systemic effects: 0.75 mg/kg, bw/day
	General population - Dermal; Long term systemic effects: 3.6 mg/kg, bw/day
	General population - Inhalation; Long term systemic effects: 0.75 mg/m ³
	General population - Oral; Long term systemic effects: 0.75 mg/kg, bw/day
PNEC	Fresh water; 3 µg/l
	marine water; 0.3 µg/l
	STP; 10 mg/l
	Sediment (Freshwater); 0.5 mg/kg
	Sediment (Marinewater); 0.5 mg/kg
	Sediment; 0.05 mg/kg
Intermittent release; 0.013 mg/l	

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700 (CAS: 9003-36-5)

DNEL	Industry - Dermal; Short term local effects: 8.3 ppm
	Industry - Dermal; Long term systemic effects: 104.15 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 29.39 mg/m ³
	Consumer - Dermal; Long term systemic effects: 62.5 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 8.7 mg/m ³
	Consumer - Oral; Long term systemic effects: 6.25 mg/kg/day
PNEC	- Fresh water; 0.003 mg/l
	- marine water; 0.0003 mg/l
	- Sediment (Freshwater); 0.294 mg/kg
	- Sediment (Marinewater); 0.0294 mg/kg
	- Soil; 0.237 mg/kg
	- Intermittent release; 0.0254

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (CAS: 68609-97-2)

DNEL	Workers - Inhalation; Long term systemic effects: 3.6 mg/m ³
	Workers - Dermal; Long term systemic effects: 1 mg/kg/day
	General population - Inhalation; Long term systemic effects: 0.87 mg/m ³
	General population - Dermal; Long term systemic effects: 0.5 mg/kg/day
	General population - Oral; Long term systemic effects: 0.5 mg/kg/day
PNEC	Fresh water; 0.106 mg/l
	Fresh water, Intermittent release; 0.072 mg/l
	marine water; 0.011 mg/l
	STP; 10 mg/l
	Sediment (Freshwater), dw; 307.16 mg/kg
	Sediment (Marinewater), dw; 30.72 mg/kg
	Soil, dw; 1.234 mg/kg

C.I. PIGMENT YELLOW 42 (CAS: 51274-00-1)

DNEL	Workers - Inhalation; Long term local effects: 10 mg/cm ²
-------------	--

BARIUM SULPHATE (CAS: 7727-43-7)

IVORY RAL1014 EPOXY PIGMENT

DNEL	Workers - Inhalation; Long term systemic effects: 10 mg/m ³ Workers - Inhalation; Long term local effects: 10 mg/m ³ Consumer - Inhalation; Long term systemic effects: 10 mg/m ³ Consumer - Oral; Long term systemic effects: 13000 mg/kg
PNEC	Fresh water; 115 µg/l STP; 62.2 mg/l Sediment (Freshwater); 600.4 mg/kg Soil; 207.7 mg/kg

Trimethylolpropane (CAS: 77-99-6)

DNEL	Workers - Inhalation; Long term systemic effects: 3.3 mg/m ³ Workers - Dermal; Long term systemic effects: 0.94 mg/kg Consumer - Inhalation; Long term systemic effects: 0.58 mg/m ³ Consumer - Dermal; Long term systemic effects: 0.34 mg/kg Consumer - Oral; Long term systemic effects: 0.34 mg/kg
-------------	--

CARBON BLACK (CAS: 1333-86-4)

DNEL	Workers - Inhalation; Long term : 0.5 mg/m ³ , respirable fraction Workers - Inhalation; Long term : 2 mg/m ³ , inhalable fraction
-------------	---

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

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 at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Check that the respirator fits tightly and the filter is changed regularly.

Environmental exposure controls

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	Liquid. or Coloured paste.
Colour	Variable

IVORY RAL1014 EPOXY PIGMENT

Odour	Slight.
Odour threshold	Not available.
pH	Not available.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	150°C
Evaporation rate	Not determined.
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not available.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not available.
Bulk density	Not available.
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	(ASTM D 1929) 400°C
Decomposition Temperature	Not available.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	No
Oxidising properties	Not available.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Hazardous reactions or instability may occur under certain conditions of storage or use.

10.4. Conditions to avoid

IVORY RAL1014 EPOXY PIGMENT

Conditions to avoid Avoid releasing into the environment.

10.5. Incompatible materials

Materials to avoid No data recorded.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information on ingredients.

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

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 11400 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes eye irritation.

Respiratory sensitisation

Respiratory sensitisation May cause sensitisation or allergic reactions in sensitive individuals.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

IVORY RAL1014 EPOXY PIGMENT

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not applicable.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 17,100.0

Species Rat

ATE oral (mg/kg) 17,100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Not applicable.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not applicable.

Skin corrosion/irritation

Animal data Moderately irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Severe skin irritation.

Trimethylolpropane

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 14,700.0

Species Rat

ATE oral (mg/kg) 14,700.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 10,000.0

Species Rabbit

ATE dermal (mg/kg) 10,000.0

Reproductive toxicity

IVORY RAL1014 EPOXY PIGMENT

Reproductive toxicity - fertility Suspected of damaging fertility. Suspected of damaging the unborn child.

CARBON BLACK

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >8000 mg/kg, Oral, Rat

Germ cell mutagenicity

Summary

In vivo mutagenicity in rats occurs by mechanisms secondary to a threshold effect and is a consequence of "lung overload," which leads to chronic inflammation and the release of genotoxic oxygen species. This mechanism is considered to be a secondary genotoxic effect and, thus, carbon black itself would not be considered to be mutagenic.

Genotoxicity - in vitro

Carbon black is not suitable to be tested directly in bacterial (Ames test) and other in vitro systems because of its insolubility. However, when organic solvent extracts of carbon black have been tested, results showed no mutagenic effects. Organic solvent extracts of carbon black can contain traces of polycyclic aromatic hydrocarbons (PAHs). A study to examine the bioavailability of these PAHs showed that they are very tightly bound to carbon black and are not bioavailable (Borm, 2005).

Genotoxicity - in vivo

In an experimental investigation, mutational changes in the hprt gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black (Driscoll, 1997). This observation is considered to be rat-specific and a consequence of "lung overload," which leads to chronic inflammation and release of reactive oxygen species. This is considered to be a secondary genotoxic effect and, thus, carbon black itself would not be considered to be mutagenic.

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

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

Ecotoxicity Toxic to aquatic life.

12.1. Toxicity

Ecological information on ingredients.

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

Toxicity WGK 2

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1.3 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 2.1 mg/l, Ceriodaphnia dubia (water flea)

IVORY RAL1014 EPOXY PIGMENT

Acute toxicity - aquatic plants EC₅₀, 72 hours: 11 mg/l, Algae

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.54 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 2.55 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: >1000 mg/l, Algae

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 1.8 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: ~ 844 mg/l, Freshwater algae

Trimethylolpropane

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >1,000 mg/l, Alburnus alburnus (bleak)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 13,000 mg/l, Daphnia magna
NOEC, 21 days: >1,000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₀, 48 hours: >102 mg/l, Daphnia magna
EC₅₀, 72 days: >1,000 mg/l, Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

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

Biodegradation Not readily biodegradable.

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700

Persistence and degradability Not readily biodegradable.

Trimethylolpropane

Biodegradation Activated sludge - Degradation 100%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

IVORY RAL1014 EPOXY PIGMENT

Ecological information on ingredients.

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

Bioaccumulative potential log Pow: 2.65 - 3.78, BCF: 3 - 31 31.00,

Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700

Bioaccumulative potential log Pow: 3.3, BCF: 150 150.00,

Trimethylolpropane

Bioaccumulative potential BCF: < 17, Cyprinus carpio (Common carp)

Partition coefficient log Pow: -0.47 (26°C)

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

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

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Avoid the spillage or runoff entering drains, sewers or watercourses.
Waste class	EWC NUMBER : Allocation of a waste code number in accordance with the European Waste Catalogue, should be carried out in agreement with an EA authorised waste disposal company.

SECTION 14: Transport information

Road transport notes	SP375 – These substances when carried in Single or Combination packaging's containing a net Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any provisions of ADR provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8
Sea transport notes	Chapter 2.10 – 2.10.2.7 – Marine Pollutants packaged in Single or Combination packaging's containing a net Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any other provisions of this code relevant to Marine Pollutants, provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of Marine Pollutants also meeting the Criteria for inclusion in another class, all provisions of this code relevant to any additional hazards continue to apply

IVORY RAL1014 EPOXY PIGMENT

Air transport notes

A197 - These substances when carried in Single or Combination packaging's containing a net Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any other provisions of these regulations provided the packaging's meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8

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. (Bisphenol A Bisphenol F Mixture)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Bisphenol F Mixture)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Bisphenol F Mixture)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Bisphenol F Mixture)

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

Transport labels



14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



IVORY RAL1014 EPOXY PIGMENT

14.6. Special precautions for user

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	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Commission Regulation (EU) 2015/830 of 28 May 2015 amending 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
Guidance	A guide to local exhaust ventilation (LEV) HSG258 (as amended) Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Revision date	15/12/2021
Revision	3
Supersedes date	15/04/2020
SDS number	41840
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.

The information contained within this document is presented in good faith and is believed to be correct. West and Senior Limited makes no representation as to the accuracy and/or completeness of this information. This information is issued on the condition that the user will determine the safety and suitability of products for their purposes prior to use. All technical details and values presented are deemed typical and do not constitute a delivery specification.