



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 DK AD GREY 18D25 EPOXY PIGMENT

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

1.1. Product identifier

Product name DK AD GREY 18D25 EPOXY PIGMENT

Product number WS15211A

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

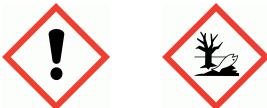
Environmental hazards Aquatic Chronic 2 - H411

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.

DK AD GREY 18D25 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 | <p>EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.</p> |
| Contains | <p>bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, polymer with (chloromethyl)oxirane and phenol, mw <=700, oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</p> |

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

| | |
|--|---------------|
| 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 | |
| TITANIUM DIOXIDE | 10-30% |
| CAS number: 13463-67-7 EC number: 236-675-5 REACH registration number: 01-2119489379-17-0000 | |
| Classification Not Classified | |

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| | |
|---|--|
| 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 | |
| CARBON BLACK | 1-5% |
| CAS number: 1333-86-4 | EC number: 215-609-9 |
| | REACH registration number: 01-2119384822-32-0000 |
| Classification | |
| Not Classified | |
| 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 | |

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.

DK AD GREY 18D25 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

DK AD GREY 18D25 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

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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

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

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

DNEL

Workers - Dermal; Short term systemic effects: 8.3 mg/kg, bw/day
 Workers - Inhalation; Short term systemic effects: 12.3 mg/m³
 Workers - Dermal; Long term systemic effects: 8.3 mg/kg, bw/day
 Workers - Inhalation; Long term systemic effects: 12.3 mg/m³
 General population - Dermal; Short term systemic effects: 3.6 mg/kg, bw/day
 General population - Inhalation; Short term systemic effects: 0.75 mg/m³
 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/m³
 General population - Oral; Long term systemic effects: 0.75 mg/kg, bw/day

DK AD GREY 18D25 EPOXY PIGMENT

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

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL Workers - Inhalation; Long term local effects: 10 mg/m³
 Professional - Inhalation; Long term local effects: 10 mg/m³
 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

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/m³
 Consumer - Dermal; Long term systemic effects: 62.5 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 8.7 mg/m³
 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/m³
 Workers - Dermal; Long term systemic effects: 1 mg/kg/day
 General population - Inhalation; Long term systemic effects: 0.87 mg/m³
 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

CARBON BLACK (CAS: 1333-86-4)

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DNEL Workers - Inhalation; Long term : 0.5 mg/m³, respirable fraction
Workers - Inhalation; Long term : 2 mg/m³, inhalable fraction

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

DNEL Workers - Inhalation; Long term local effects: 10 mg/cm²

BARIUM SULPHATE (CAS: 7727-43-7)

DNEL Workers - Inhalation; Long term systemic effects: 10 mg/m³
Workers - Inhalation; Long term local effects: 10 mg/m³
Consumer - Inhalation; Long term systemic effects: 10 mg/m³
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/m³
Workers - Dermal; Long term systemic effects: 0.94 mg/kg
Consumer - Inhalation; Long term systemic effects: 0.58 mg/m³
Consumer - Dermal; Long term systemic effects: 0.34 mg/kg
Consumer - Oral; Long term systemic effects: 0.34 mg/kg

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

DK AD GREY 18D25 EPOXY PIGMENT

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | Liquid. or Coloured paste. |
| Colour | Variable |
| 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

DK AD GREY 18D25 EPOXY PIGMENT

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

10.4. Conditions to avoid

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

DK AD GREY 18D25 EPOXY PIGMENT

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.

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.

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.

DK AD GREY 18D25 EPOXY PIGMENT

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.

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

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

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-epoxipropoxy)phenyl]propane

Ecotoxicity Toxic to aquatic life.

12.1. Toxicity

Ecological information on ingredients.

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

Toxicity WGK 2

DK AD GREY 18D25 EPOXY PIGMENT

Acute aquatic toxicity

| | |
|---|--|
| Acute toxicity - fish | LC ₅₀ , 96 hours: 1.3 mg/l, Fish |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 2.1 mg/l, Ceriodaphnia dubia (water flea) |
| Acute toxicity - aquatic plants | EC ₅₀ , 72 hours: 11 mg/l, Algae |

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

Acute aquatic toxicity

| | |
|---|---|
| Acute toxicity - fish | LC ₅₀ , 96 hours: 2.54 mg/l, Fish |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 2.55 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | EC ₅₀ , 72 hours: >1000 mg/l, Algae |

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

Acute aquatic toxicity

| | |
|---|--|
| Acute toxicity - fish | LC ₅₀ , 96 hours: > 1.8 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 7.2 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | EC ₅₀ , 72 hours: ~ 844 mg/l, Freshwater algae |

Trimethylolpropane

Acute aquatic toxicity

| | |
|---|--|
| Acute toxicity - fish | LC ₅₀ , 96 hours: >1,000 mg/l, Alburnus alburnus (bleak) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 13,000 mg/l, Daphnia magna NOEC, 21 days: >1,000 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | EC ₀ , 48 hours: >102 mg/l, Daphnia magna EC ₅₀ , 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

DK AD GREY 18D25 EPOXY PIGMENT

Biodegradation Activated sludge - Degradation 100%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

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

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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

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 |

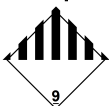
14.2. UN proper shipping name

| | |
|--------------------------------|---|
| 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 |

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ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

ADR transport category 3

Emergency Action Code •3Z

Hazard Identification Number 90
(ADR/RID)

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.

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 29/11/2021

Revision 2

Supersedes date 27/07/2020

SDS number 42384

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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.

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