

SAFETY DATA SHEET

Intergard 343 Grey Part A

Section 1. Identification

GHS product identifier : Intergard 343 Grey Part A

Product code : KNA342

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

| Identified uses | |
|---|--------|
| Professional application of coatings and inks | |
| Uses advised against | Reason |
| All Other Uses | |

Supplier's details : International Paint (PTY) Ltd
 1 Paints Place
 Dickens Road
 Umbogintwini
 KZN 4120,
 South Africa
 Tel: +27 31 904 8000

+27 31 904 8000 (24hr)

Emergency telephone number (with hours of operation) : 10177 (For use only by licensed medical professionals.)

e-mail address of person responsible for this SDS : sdsfellinguk@akzonobel.com

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS) and hearing organs) - Category 1
 LONG-TERM AQUATIC HAZARD - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

- Hazard statements** : **F**lammable liquid and vapour.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs)
Toxic to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** : **P** Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid release to the environment. Avoid breathing vapour. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not breathe gas, vapour or spray.
- Response** : Collect spillage. Get medical attention if you feel unwell. **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water or shower. **IF ON SKIN:** Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Wear appropriate respirator when ventilation is inadequate.
- Other hazards which do not result in classification** : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name | % by weight | CAS number | Classification |
|---|-------------|------------|--|
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin | ≥25 - ≤50 | 25068-38-6 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| xylene | ≤13 | 1330-20-7 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Asp. Tox. 1, H304 |
| ethylbenzene | ≤3 | 100-41-4 | Flam. Liq. 2, H225 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT RE 2, H373 (hearing) |

Section 3. Composition/information on ingredients

| | | | |
|--|------|------------|---|
| butan-1-ol | ≤1.9 | 71-36-3 | organs) Asp. Tox. 1, H304 Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 |
| Naphtha (petroleum), hydrodesulfurized heavy | ≤3 | 64742-82-1 | Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| 1-methoxy-2-propanol | ≤3 | 107-98-2 | Flam. Liq. 3, H226 STOT SE 3, H336 |
| Solvent naphtha (petroleum), light arom. | ≤1.3 | 64742-95-6 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
headache
drowsiness/fatigue
dizziness/vertigo
muscle weakness
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
metal oxide/oxides

Section 5. Firefighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot

Section 7. Handling and storage

| | |
|---|---|
| Advice on general occupational hygiene | : be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Vapours are heavier than air and may spread along floors. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. |

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|--|---|
| Barium sulfate | DOL OEL (South Africa, 8/1995). TWA: 2 mg/m ³ 8 hours. Form: Respirable dust |
| Talc , not containing asbestiform fibres | DOL OEL (South Africa, 8/1995). TWA: 1 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: total inhalable dust |
| xylene | DOL OEL (South Africa, 8/1995). Absorbed through skin. TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. STEL: 650 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. |
| Aluminium powder (stabilized) | DOL OEL (South Africa, 8/1995). TWA: 5 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: total inhalable dust |
| ethylbenzene | DOL OEL (South Africa, 8/1995). STEL: 545 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. |
| butan-1-ol | DOL OEL (South Africa, 8/1995). Absorbed through skin. STEL: 150 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. |
| Naphtha (petroleum), hydrodesulfurized heavy | DOL OEL (South Africa, 8/1995). TWA: 575 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. STEL: 720 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. |
| 1-methoxy-2-propanol | DOL OEL (South Africa, 8/1995). Absorbed through skin. |

Section 8. Exposure controls/personal protection

TWA: 360 mg/m³ 8 hours.
 TWA: 100 ppm 8 hours.
 STEL: 1080 mg/m³ 15 minutes.
 STEL: 300 ppm 15 minutes.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals and micro-organisms. Recommended: Viton® or Nitrile gloves. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

| | |
|---|--|
| Physical state | : Liquid. |
| Colour | : Metallic. |
| Odour | : Solvent. |
| Odour threshold | : Not available. |
| pH | : Not applicable. |
| Melting point | : Not available. |
| Boiling point | : Lowest known value: 136.16°C (277.1°F) (xylene). |
| Flash point | : Closed cup: 28°C (82.4°F) |
| Evaporation rate | : Not available. |
| Flammability (solid, gas) | : Not available. |
| Lower and upper explosive (flammable) limits | : Greatest known range: Lower: 0.8% Upper: 6.7% (xylene) |
| Vapour pressure | : Not available. |
| Vapour density | : Not available. |
| Relative density | : 1.65 |
| Solubility | : Insoluble in the following materials: cold water. |
| Partition coefficient: n-octanol/water | : Not available. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | : Kinematic (room temperature): 622 mm ² /s (622 cSt) |

Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials | : Reactive or incompatible with the following materials: oxidizing materials |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|------------------------|---------|-------------|----------|
| Xylene ethylbenzene | LD50 Oral | Rat | 4300 mg/kg | - |
| | LC50 Inhalation Gas. | Rabbit | 4000 ppm | 4 hours |
| butan-1-ol | LD50 Dermal | Rabbit | 17800 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |
| 1-methoxy-2-propanol | LC50 Inhalation Vapour | Rat | 24 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 3400 mg/kg | - |
| Solvent naphtha (petroleum), light arom. | LD50 Oral | Rat | 790 mg/kg | - |
| | LD50 Dermal | Rabbit | 13 g/kg | - |
| Solvent naphtha (petroleum), light arom. | LD50 Oral | Rat | 6600 mg/kg | - |
| | LD50 Oral | Rat | 8400 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|--------------------------|---------|-------|--------------------------|-------------|
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin | Eyes - Mild irritant | Rabbit | - | 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 microliters | - |
| ethylbenzene | Skin - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 500 milligrams | - |
| butan-1-ol | Skin - Mild irritant | Rabbit | - | 24 hours 15 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| 1-methoxy-2-propanol | Eyes - Severe irritant | Rabbit | - | 0.005 Milliters | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| Solvent naphtha (petroleum), light arom. | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 100 microliters | - |

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|---|
| xylene | Category 3 | Not applicable. | Respiratory tract irritation |
| ethylbenzene | Category 3 | Not applicable. | Respiratory tract irritation |
| butan-1-ol | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Naphtha (petroleum), hydrodesulfurized heavy | Category 3 | Not applicable. | Narcotic effects |
| 1-methoxy-2-propanol | Category 3 | Not applicable. | Narcotic effects |
| Solvent naphtha (petroleum), light arom. | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| ethylbenzene | Category 2 | Not determined | hearing organs |
| Naphtha (petroleum), hydrodesulfurized heavy | Category 1 | Inhalation | central nervous system (CNS) |

Aspiration hazard

| Name | Result |
|--|--------------------------------|
| xylene | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |
| Naphtha (petroleum), hydrodesulfurized heavy | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), light arom. | ASPIRATION HAZARD - Category 1 |

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
headache
drowsiness/fatigue
dizziness/vertigo
muscle weakness
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Section 11. Toxicological information

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|--|---------------|
| <input checked="" type="checkbox"/> Oral | 52666.7 mg/kg |
| Dermal | 10861 mg/kg |
| Inhalation (vapours) | 86.89 mg/l |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|--|--|--|----------|
| <input checked="" type="checkbox"/> xylene | Acute LC50 8500 µg/l Marine water | Crustaceans - Palaemonetes pugio | 48 hours |
| ethylbenzene | Acute LC50 13400 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Acute EC50 3.6 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| butan-1-ol | Acute LC50 18.4 to 25.4 mg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 5.1 to 5.7 mg/l Marine water | Fish - Menidia menidia | 96 hours |
| | Acute EC50 1983 to 2072 mg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 1910 mg/l Fresh water | Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| Solvent naphtha (petroleum), light arom. | Acute EC50 6.14 mg/m ³ | Daphnia | 48 hours |
| | Acute LC50 9.22 mg/m ³ | Fish - Mykiss | 96 hours |

Persistence and degradability

Section 12. Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin | - | - | Not readily |
| ethylbenzene | - | - | Readily |
| Naphtha (petroleum), hydrodesulfurized heavy | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-------------|-----------|
| Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin | 2.64 to 3.78 | - | low |
| xylene | 3.12 | 8.1 to 25.9 | low |
| ethylbenzene | 3.6 | 15 | low |
| butan-1-ol | 1 | - | low |
| Naphtha (petroleum), hydrodesulfurized heavy | - | 10 to 2500 | high |
| 1-methoxy-2-propanol | <1 | - | low |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations





Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | UN | IMDG | IATA |
|-------------------------|--------|---|--------|
| UN number | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT. Marine pollutant (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, Naphtha (petroleum), hydrodesulfurized heavy) | PAINT |
| | | | |

Section 14. Transport information

| | | | |
|-----------------------------------|--|--|--|
| Transport hazard class(es) | 3  | 3   | 3  |
| Packing group | III | III | III |
| Environmental hazards | No. | Yes. | No. |
| Additional information | - | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

IMDG Code Segregation group : Not applicable.

Special precautions for user : **Transport within user's premises:** 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.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--------------------------|--|
| Australia | : <input type="checkbox"/> Not determined. |
| Canada | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Europe | : Not determined. |
| Japan | : <input checked="" type="checkbox"/> Japan inventory (ENCS): Not determined. <input checked="" type="checkbox"/> Japan inventory (ISHL): Not determined. |
| Malaysia | : <input type="checkbox"/> Not determined. |
| New Zealand | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Philippines | : <input type="checkbox"/> Not determined. |
| Republic of Korea | : <input checked="" type="checkbox"/> All components are listed or exempted. |

Section 15. Regulatory information

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|----------------------|--|
| Taiwan | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Turkey | : <input checked="" type="checkbox"/> Not determined. |
| United States | : All components are listed or exempted. |

Section 16. Other information

Justification

| Classification | Justification |
|--|---|
| <input checked="" type="checkbox"/> Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT RE 1, H372 (central nervous system (CNS) and hearing organs) Aquatic Chronic 2, H411 | On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method |

History

| | |
|---------------------------------------|--------------|
| Date of printing | : 05/06/2017 |
| Date of issue/Date of revision | : 05/06/2017 |
| Date of previous issue | : 24/06/2016 |
| Version | : 3 |

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|-----------------------------|--|
| Key to abbreviations | : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations |
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|-------------------|------------------|
| References | : Not available. |
|-------------------|------------------|

Indicates information that has changed from previously issued version.

Notice to reader

IMPORTANT NOTE: the information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates.

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

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Section 16. Other information

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