SAFETY DATA SHEET Bar-Rust 236 Buff Part A

Section 1. Identification

GHS product identifier Product code : Bar-Rust 236 Buff Part A

: NDA064

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	 AMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 1 LONG-TERM AQUATIC HAZARD - Category 2
GHS label elements Hazard pictograms	
Signal word	: Danger

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Section 2. Hazards identification

Hazard statements	 Fammable liquid and vapour. Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes damage to organs through prolonged or repeated exposure. (hearing organs) Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: 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. Immediately call a POISON CENTER or physician.
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 : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture :

: Mixture

Ingredient name	% by weight	CAS number	Classification
Peaction 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	≤7.8	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
Solvent naphtha (petroleum), light arom.	≤5	64742-95-6	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411





Section 3. Composition/information on ingredients

		•	
butan-1-ol	≤4.8	71-36-3	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336
crystalline silica, respirable powder	≤3	14808-60-7	STOT RE 1, H372
ethylbenzene	≤1.8	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 organs) Asp. Tox. 1, H304
Oxirane, mono[(C10-16-alkyloxy)methyl] derivs.	≤3	68081-84-5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 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	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.



Section 4. First aid measures

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and de	elayed

MOSt Important Symptoms/	<u>is, acute and delayed</u>	
Potential acute health effe		
Eye contact	Causes serious eye damage.	
Inhalation	May give off gas, vapour or dust that is very irritating or corrosive to the respirator system.	ry
Skin contact	Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	Irritating to mouth, throat and stomach.	
<u>Over-exposure signs/sym</u>	<u>IS</u>	
Eye contact	Adverse symptoms may include the following: pain 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: pain or irritation redness blistering may occur	
Ingestion	Adverse symptoms may include the following: stomach pains	
Indication of immediate me	l 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 is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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, CO ₂ , 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.



Section 5. Firefighting measures

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Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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 con	<u>nta</u>	<u>inment and cleaning up</u>
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
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Section 7. Handling and storage

		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/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.
Advice on general occupational hygiene	:	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. Store locked up. 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
₽ alc , not containing asbestiform fibres	DOL OEL (South Africa, 8/1995). TWA: 1 mg/m ³ 8 hours. Form: Respirable dust
	TWA: 10 mg/m³ 8 hours. Form: total inhalable dust
crystalline silica, respirable powder	DOL OEL (South Africa, 8/1995). TWA: 0.4 mg/m ³ 8 hours. Form: Respirable dust
titanium dioxide	DOL OEL (South Africa, 8/1995). TWA: 10 mg/m ³ 8 hours. Form: Respirable dust TWA: 5 mg/m ³ 8 hours. Form: total
xylene	inhalable dust DOL OEL (South Africa, 8/1995). Absorbed through skin. TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
Mica-group minerals	STEL: 650 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. DOL OEL (South Africa, 8/1995). TWA: 1 mg/m ³ 8 hours. Form: Respirable dust
butan-1-ol	TWA: 10 mg/m ³ 8 hours. Form: total inhalable dust DOL OEL (South Africa, 8/1995). Absorbed through skin. STEL: 150 mg/m ³ 15 minutes.
crystalline silica, respirable powder	STEL: 50 ppm 15 minutes. DOL OEL (South Africa, 8/1995).

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Section 8. Exposure controls/personal protection

	TWA: 0.4 mg/m ³ 8 hours. Form: Respirable
	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.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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
- 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.



Section 8. Exposure controls/personal protection

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

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Beige.
Odour	: Solvent.
Odour threshold	: Not available.
рН	: Not applicable.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 38°C (100.4°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Ø reatest known range: Lower: 0.8% Upper: 6.7% (xylene)
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 1.61
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): 2624 mm ² /s (2624 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

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Peaction 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	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
butan-1-ol	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Eyes - Severe irritant	Rabbit	-	0.005 Mililiters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

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
x ylene	Category 3	Not applicable.	Respiratory tract irritation
Solvent naphtha (petroleum), light arom.	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
butan-1-ol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
ethylbenzene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Fystalline silica, respirable powder ethylbenzene			Not determined hearing organs

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system.
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 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: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

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<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> <u>Short term exposure</u>





Section 11. Toxicological information

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 effe	ects
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
	24035.1 mg/kg 20553.6 mg/kg 166.5 mg/l

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	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
butan-1-ol	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
ethylbenzene	Acute EC50 3.6 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	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

Persistence and degradability



Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
A-(epichlorhydrin); epoxy	-	-	Not readily
resin ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Peaction product: bisphenol- A-(epichlorhydrin); epoxy resin	2.64 to 3.78	-	low
xylene butan-1-ol ethylbenzene	3.12 1 3.6	8.1 to 25.9 - 15	low low low

<u>Mobility in soil</u>

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

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	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	AINT. Marine pollutant (reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, Solvent naphtha (petroleum), light arom.)	PAINT
Transport hazard class(es)	3	3	3
Packing group		III	Ш

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AkzoNobel

Section 14. Transport information

Environmental hazards	No.	Yes.	No.
Additional information	-	The marine pollutant mark i not required when transport in sizes of ≤5 L or ≤5 kg.	
IMDG Code Segrega group	ition : Not applica	able.	
Special precautions	upright and	within user's premises: always tran d secure. Ensure that persons transpo of an accident or spillage.	
Transport in bulk ac to Annex II of Marpo the IBC Code	-	ble.	
Section 15. F	Regulatory info	ormation	
Not listed. <u>Montreal Protocol</u> Not listed. <u>Stockholm Conven</u>	<u>Convention List Schec</u> (Annexes A, B, C, E) ntion on Persistent Org	dules I, II & III Chemicals Janic Pollutants	
Not listed. <u>Rotterdam Conven</u> Not listed.	tion on Prior Inform Co	<u>onsent (PIC)</u>	
UNECE Aarhus Pro	otocol on POPs and He	eavy Metals	
Inventory list Australia Canada China Europe Japan Malaysia New Zealand Philippines Republic of Korea	Japan inver : Not determin : Not determin : Not determin : Not determin	ned. ned. ntory (ENCS) : Not determined. ntory (ISHL) : Not determined. ned. ned. ned.	
Taiwan Turkey	: Not determine: Not determine:		



Section 16. Other information

Justification

Class	sification Justification	
Fam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (hearing Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method	
History		
Date of printing	: 31/05/2017	
Date of issue/Date of revision	: 31/05/2017	
Date of previous issue	: 02/02/2015	
Version	: 2	
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 = Internediate 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 	
References	: Not available	

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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