In accordance with the Standard for Classification and Labelling of Chemical Substance and Material Safety Data Sheet, Article 10 Paragraph

SAFETY DATA SHEET

INTERSEAL 670HS PURE ORANGE

Section 1. Chemical product and company identification

A. Product name : INTERSEAL 670HS PURE ORANGE

Product code : EGD259

B. <u>Relevant identified uses of the substance or mixture and uses advised against</u>

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

C. Manufacturer	: International Farg AB Holmedalen 3 Aspereds Industriomrade SE-424 22 Angered Sweden
Emorrou tolophono	Tel: +46 (0) 31 928500 Fax: +46 (0) 31 928530
Emergency telephone number (with hours of operation)	: +46 8 33 12 31
e-mail address of person responsible for this SDS	: sdsfellinguk@akzonobel.com

Section 2. Hazards identification

A. Hazard classification	: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
	LONG-TERM AQUATIC HAZARD - Category 3

B. GHS label elements, including precautionary statements

Symbol	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statements

:



Section 2. Hazards identification

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. 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. Do not breathe vapour. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response	Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. 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. 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 locked up. 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.
C. Other hazards which do	None known.

not result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	Common name	CAS number	%	Classification
Talc , not containing asbestiform fibres	talc (non-asbestos form)	14807-96-6	≥20 - <25	Not classified.
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	phenoxy resin	25068-38-6	≥10 - <20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
xylene	xylene	1330-20-7	≥5 - <10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 STOT RE 1, H372
titanium dioxide	Titanium dioxide	13463-67-7	≥0.1 - <5	Carc. 2, H351
Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)]bis [oxirane]	phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4, 1-phenyleneoxymethylene)] bis[oxirane]	25036-25-3	<10	Skin Irrit. 2, H315

Section 3. Composition/information on ingredients

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				Eye Irrit. 2, H319 Skin Sens. 1, H317
1-methoxy-2-propanol	1-methoxy-2-propanol	107-98-2	<10	Flam. Liq. 3, H226 STOT SE 3, H336
ethylbenzene	ethylbenzene	100-41-4	≥0.1 - <5	Flam. Liq. 2, H225 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304
cyclohexanone	cyclohexanone	108-94-1	≥0.1 - <5	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351

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

Α.	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.
В.	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.
C.	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. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
D.	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. 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.

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Section 4. First aid measures

Ε.	Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	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

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Α.	Extinguishing media Suitable extinguishing		Use dry chemical, CO_2 , water spray (fog) or foam.
	media	•	
	Unsuitable extinguishing media	:	Do not use water jet.
В.	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 harmful 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 nitrogen oxides halogenated compounds metal oxide/oxides
C.	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.
	Special precautions 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.

Section 6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures
 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

B. 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.

C. Methods and material for containment and cleaning up

Section 6. Accidental release measures

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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

A. 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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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/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.
в.	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

A. <u>Control parameters</u>

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Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Talc , not containing asbestiform fibres	Ministry of Labor (Republic of Korea, 8/2013).
	TWA: 2 mg/m ³ 8 hours. Form: Respirable
	fraction
	TWA: 6 mg/m ³ 8 hours. Form: total fiber (
	fiber size less than 5 µm)
xylene	Ministry of Labor (Republic of Korea,
	8/2013).
	STEL: 655 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 435 mg/m ³ 8 hours.
titanium dioxide	TWA: 100 ppm 8 hours.
	Ministry of Labor (Republic of Korea, 8/2013).
	TWA: 10 mg/m ³ 8 hours. Form: total dust
	with less than 1% of free SiO2
1-methoxy-2-propanol	Ministry of Labor (Republic of Korea,
	8/2013).
	STEL: 540 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 360 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
ethylbenzene	Ministry of Labor (Republic of Korea,
	8/2013).
	STEL: 545 mg/m ³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 435 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
cyclohexanone	Ministry of Labor (Republic of Korea,
	8/2013). Absorbed through skin.
	TWA: 100 mg/m ³ 8 hours.
	TWA: 25 ppm 8 hours.
	STEL: 200 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.
	STEL. 50 ppm 15 minutes.

В.	Appropriate engineering controls	:	Jse only with adequate ventilation. Use process enclosures, local exhaust entilation or other engineering controls to keep worker exposure to airborne ontaminants below any recommended or statutory limits. The engineering control lso need to keep gas, vapour or dust concentrations below any lower explosive mits. 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.

C. Personal protective equipment 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. Eye 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.

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Section 8. Exposure controls/personal 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.
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.

Section 9. Physical and chemical properties

Α.	<u>Appearance</u>		
	Physical state	:	Liquid.
	Colour	:	Various
В.	Odour	:	Solvent.
C.	Odour threshold	:	Not available.
D.	рН	:	Not applicable.
Ε.	Melting/freezing point	:	Not available.
F.	Boiling point/boiling range	:	Not available.
G.	Flash point	:	Closed cup: 35°C (95°F)
	Fire point	:	Not available.
Н.	Evaporation rate	:	Not available.
I.	Flammability (solid, gas)	:	Not available.
J.	Lower and upper explosive (flammable) limits	:	Greatest known range: Lower: 0.8% Upper: 6.7% (xylene)
Κ.	Vapour pressure	:	Not available.
L.	Solubility	:	Insoluble in the following materials: cold water.
Μ.	Vapour density	:	Not available.
N.	Relative density	:	1.62
0.	Partition coefficient: n- octanol/water	:	Not available.
Ρ.	Auto-ignition temperature	:	Not available.

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Section 9. Physical and chemical properties

Q. Decomposition temperature	: Not available.	
R. Viscosity	: Kinematic (room temperature): 1763 mm ² /s (1763 cSt)	
S. Molecular weight	: Not applicable.	

Section 10. Stability and reactivity

Α.	Chemical stability	:	The product is stable.
	Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
В.	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.
C.	Incompatible materials	:	Reactive or incompatible with the following materials: oxidizing materials
D.	Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Α.	Information on likely routes of exposure	: Not available.	
routes of exposure Potential acute health effects Inhalation : Exposure to decomposition products may cause a health hazard. Serious effmay be delayed following exposure. Ingestion : Irritating to mouth, throat and stomach. Skin contact : Causes skin irritation. May cause an allergic skin reaction. Eye contact : Causes serious eye irritation. Over-exposure signs/symptoms Inhalation Inhalation : Adverse symptoms may include the following: headache drowsiness/fatigue dizziness/retigo muscle weakness unconsciousness Ingestion : No specific data. Skin contact : Adverse symptoms may include the following: irritation redness Eye contact : Adverse symptoms may include the following: irritation			
routes of exposure <u>Potential acute health er</u> Inhalation Ingestion Skin contact Eye contact <u>Over-exposure signs/sy</u> Inhalation Ingestion Skin contact		: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.	
Potential acute health eff Inhalation Ingestion Skin contact Eye contact <u>Over-exposure signs/syr</u> Inhalation		: Irritating to mouth, throat and stomach.	
Potential acute health effor Inhalation Ingestion Skin contact Eye contact <u>Over-exposure signs/sym</u> Inhalation		: Causes skin irritation. May cause an allergic skin reaction.	
Eye contact : Causes serious eye irritation.		: Causes serious eye irritation.	
routes of exposure Potential acute health effects Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Ingestion Irritating to mouth, throat and stomach. Skin contact Causes skin irritation. May cause an allergic skin reaction. Eye contact Causes serious eye irritation. Over-exposure signs/symptoms Adverse symptoms may include the following: headache drowsiness/fatigue dizziness/vertigo muscle weakness unconsciousness Ingestion No specific data. Skin contact Adverse symptoms may include the following: irritation redness Eye contact Adverse symptoms may include the following: irritation muscle weakness unconsciousness Ingestion Adverse symptoms may include the following: irritation redness Eye contact Adverse symptoms may include the following: irritation redness Eye contact Adverse symptoms may include the following: irritation redness Eye contact Adverse symptoms may include the following: irritation watering redness			
	Inhalation	headache drowsiness/fatigue dizziness/vertigo muscle weakness	
	Ingestion	: No specific data.	
	Skin contact	irritation	
	Eye contact	pain or irritation watering	
В.	Health hazards		

B. <u>Health hazards</u> <u>Acute toxicity</u>

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Section 11. Toxicological information

	<u> </u>			
Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Oral	Rat	4300 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
	LD50 Dermal	Rabbit	17800 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LD50 Oral	Rat	1800 mg/kg	-
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Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Talc , not containing asbestiform fibres	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
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	-
	Skin - Severe irritant	Rabbit	-	microliters 24 hours 2 milligrams	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	Micrograms Intermittent 24 hours 500	-
	Skin - Mild irritant	Rabbit	-	milligrams 500 milligrams	-
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 501 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-
cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250	-
	Eyes - Severe irritant	Rabbit	-	Micrograms 20 milligrams	-
	Skin - Mild irritant Skin - Mild irritant	Human Rabbit	-	48 hours 50 Percent 500	-
		Rabbil	-	milligrams	-

Sensitisation

Not available.

CMR - ISHA Article 42 Public Notice No 2013-38 Occupational Exposure Limits

Product/ingredient name	CAS number	Classification
Titanium dioxide	13463-67-7	Carc. 2
Ethyl benzene	100-41-4	Carc. 2
Cyclohexanone	108-94-1	Carc. 2

Mutagenicity

:

Section 11. Toxicological information

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene 1-methoxy-2-propanol ethylbenzene	Category 3 Category 3 Category 3	Not applicable.	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	0,	Route of exposure	Target organs
xylene ethylbenzene	Category 1 Category 2		Not determined hearing organs

Aspiration hazard

Name	Result	
ethylbenzene	ASPIRATION HAZARD - Category 1	

Potential chronic health effects

Chronic toxicity

Not available.

General	: May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
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.

ATE value

:

Route	Result
Oral	44264.4 mg/kg
Dermal	14221.8 mg/kg
Inhalation (vapours)	117.7 mg/l

Section 12. Ecological information

A. Ecotoxicity

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
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
cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 630000 µg/l Fresh water Chronic EC10 3.56 mg/l Fresh water	Fish - Pimephales promelas Algae - Chlamydomonas reinhardtii - Exponential growth phase	96 hours 72 hours

B. Persistence and degradability

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

C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol- A-(epichlorhydrin); epoxy	2.64 to 3.78	-	low
resin			
xylene	3.12	8.1 to 25.9	low
titanium dioxide	-	352	low
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	15	low
cyclohexanone	0.86	-	low

D. Mobility in soil

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Soil/water partition : Not available. coefficient (Koc)

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

Section 13. Disposal considerations

 A. 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.



Section 13. Disposal considerations

B. Disposal precautions : 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
A. UN number	UN1263	UN1263	UN1263
B. UN proper shipping name	PAINT	PAINT	PAINT
C. Transport hazard class(es)	3	3	3
D. Packing group	III	111	Ш
E. Environmental hazards	No.	No.	No.
F. Additional information	-	-	-

IMDG Code Segregation : Not applicable. group

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.

Section 15. Regulatory information

Regulation according to	<u>ISHA</u>	
ISHA article 37 (Harmful substances prohibited from manufacture)	: The following components are listed: Talc	
ISHA article 38 (Harmful substances requiring permission)	: None of the components are listed.	
Article 2 of Youth Protection Act on Substances Hazardous to Youth	: Not applicable.	
Exposure Limits of Chen	nical Substances and Physical Factors	
Talc , not containing asbe Xylene titanium dioxide 1-methoxy-2-propanol ethylbenzene		
	ISHA article 37 (Harmful substances prohibited from manufacture) ISHA article 38 (Harmful substances requiring permission) Article 2 of Youth Protection Act on Substances Hazardous to Youth Exposure Limits of Chem The following components Talc , not containing asbe Xylene titanium dioxide 1-methoxy-2-propanol	(Harmful substances prohibited from manufacture) ISHA article 38 : None of the components are listed. (Harmful substances requiring permission) Article 2 of Youth : Not applicable. Protection Act on Substances Hazardous to Youth Exposure Limits of Chemical Substances and Physical Factors The following components have an OEL: Talc , not containing asbestiform fibres Xylene titanium dioxide 1-methoxy-2-propanol ethylbenzene

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Section 15. Regulatory information

	ISHA Enforcement Regs Annex 11-3 (Exposure standards established for harmful factors)	:	None of the components are listed.
	ISHA Enforcement Regs Annex 11-4 (Harmful factors subject to Work Environment Measurement)	:	The following components are listed: Xylene, o,m,p-isomers; Ethylbenzene; Titanium dioxide; Talc, non-asbestos form
	ISHA Enforcement Regs Annex 12-2 (Harmful Factors Subject to Special Health Check- up)	:	The following components are listed: Xylene; Ethylbenzene
	Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control)	:	The following components are listed: Xylene; Ethyl benzene; Titanium dioxide
В.	Regulation according to 0	Ch	emicals Control Act
	K-Reach Article 20 (Toxic chemicals)	:	Not applicable
	K-Reach Article 27 (Prohibited)	:	The following components are listed: Talc
	K-Reach Article 27 (Restricted)	:	None of the components are listed.
	CSCA Article 11 (TRI)	:	The following components are listed: 4,4'-(1-Methylethylidene) bisphenol polymer with (chloromethyl)oxirane; Xylene; Ethylbenzene
	Korea inventory	:	Not determined.
	CSCA Article 39 (Accident Precaution Chemicals)	:	None of the components are listed.
C.	Dangerous Materials Safety Management Act	:	Class: Class 4 - Flammable Liquid Item: 4. Class 2 petroleums - Water-insoluble liquid Threshold: 1000 L Danger category: III Signal word: Contact with sources of ignition prohibited
D.	Wastes regulation	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Е.	Regulation according to c	oth	er foreign laws
	Europe inventory	:	Not determined.
	United States inventory (TSCA 8b)	:	Not determined.
	Japan inventory	:	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.

Section 16. Other information

Α.	References	:	Not available.
В.	Date of issue/Date of revision	:	30/05/2017
C.	Version	:	3
	Date of printing	:	30/05/2017
D.	Other		

:

Section 16. Other information

Indicates information that	has changed from previously issued version.
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

Notice to reader

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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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