

SAFETY DATA SHEET

FRS HARDENER

Section 1. Identification

GHS product identifier : FF SDS code : 21

: FRS HARDENER : 21040000D

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

Identified uses		
Paint. Professional use Industrial use		
	Uses advised against	
All other uses		
Product use	: Filler for interior use	
Supplier's details MAPAERO SAS 10, Avenue de la F 09103 PAMIERS (France		
Emergency telephone number (with hours of operation)	: +33 (0)5 34 01 34 01 +33 (0)5 61 60 23 30	
Section 2. Hazar	ds identification	
OSHA/HCS status Classification of the	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). FLAMMABLE LIQUIDS - Category 3 	
substance or mixture	ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	
<u>GHS label elements</u> Hazard pictograms		
Signal word	: Warning	



Section 2. Hazards identification

Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. (hearing organs)
Precautionary statements	
Prevention	: Øbtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, sparks and hot surfaces. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe vapor. Wash hands thoroughly after handling.
Response	: F exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 advice or attention.
Storage	: Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

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: Mixture

Ingredient name	%	CAS number
✓examethylene diisocyanate, oligomers	≥50 - ≤75	28182-81-2
2-methoxy-1-methylethyl acetate	≥10 - <20	108-65-6
xylene	≥10 - ≤20	1330-20-7
ethylbenzene	≤3	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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

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Section 4. First aid measures

Description of necessary f	<u>irst aid measures</u>		
Eye contact		eyes with plenty of water, occasionally lifting the r and remove any contact lenses. Continue to lical attention.	
Inhalation	is suspected that f or self-contained b respiratory arrest o may be dangerous Get medical attent place in recovery p	fresh air and keep at rest in a position comfort umes are still present, the rescuer should weat preathing apparatus. If not breathing, if breath occurs, provide artificial respiration or oxygen is to the person providing aid to give mouth-to- tion. If necessary, call a poison center or physic position and get medical attention immediately ght clothing such as a collar, tie, belt or waistba	ar an appropriate mask ing is irregular or if by trained personnel. It mouth resuscitation. sician. If unconscious, Maintain an open
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Section 4. First aid measures

	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.
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. 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.

Most important symptoms/effects, acute and delayed

wost important symptoms/e	nects, acute and delayed
Potential acute health effec	<u>ts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/symp	toms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Indication of immediate med	ical attention and special treatment needed, if necessary
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. If 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. Fire-fig	hting measures
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

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Section 5. Fire-fighting measures

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Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized 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 spilled 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).
Methods and materials for co	ontainment 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 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 spilled 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	history of skin sen this product is use handle until all saf or on skin or cloth adequate ventilation not enter storage original container	e personal protective equipment (see Section 8) isitization problems should not be employed in a ed. Avoid exposure - obtain special instructions fety precautions have been read and understood ing. Do not breathe vapor or mist. Do not inger on. Wear appropriate respirator when ventilation areas and confined spaces unless adequately v or an approved alternative made from a compa- n not in use. Store and use away from heat, sp	any process in which before use. Do not d. Do not get in eyes est. Use only with on is inadequate. Do ventilated. Keep in the tible material, kept
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Section 7. Handling and storage

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		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.
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. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Pexamethylene diisocyanate, oligomers 2-methoxy-1-methylethyl acetate xylene	None. OARS WEEL (United States, 7/2018). TWA: 50 ppm 8 hours. ACGIH TLV (United States, 1/2022). [xylene] Notes: 1996 Adoption Substances for which there is a Biological Exposure Index or Indices Refers to Appendix A Carcinogens. STEL: 651 mg/m ³ 15 minutes. TWA: 434 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. OSHA PEL (United States, 5/2018). [Xylenes] TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). [Xylenes (o-, m-, p-isomers)] STEL: 655 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 435 mg/m ³ 8 hours.
ethylbenzene	TWA: 100 ppm 8 hours. ACGIH TLV (United States, 1/2022). Ototoxicant. Notes: Substances for which there is a Biological Exposure Index or Indices 2002 Adoption. TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2020). STEL: 545 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 435 mg/m ³ 10 hours. TWA: 435 mg/m ³ 10 hours. TWA: 100 ppm 10 hours. TWA: 435 mg/m ³ 8 hours. TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989).
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Section 8. Exposure controls/personal protection

STEL: 545 mg/m³ 15 minute STEL: 125 ppm 15 minutes. TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.	S.
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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, vapor 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 measu	ires
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	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
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	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Date of previous issue	: 10/6/2022	6/14	AkzoNobel
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Odor threshold	: Not available.		
Odor	: Characteristic.		
Color	: Colorless.		
Physical state	: Liquid.		
<u>Appearance</u>			

Section 9. Physical and chemical properties and safety characteristics

рН	Not a	available. [DIN EN 1262]
Melting point/freezing point	Not a	available.
Boiling point, initial boiling point, and boiling range	Not a	available.
Flash point	Clos	ed cup: 37°C (98.6°F) [Pensky-Martens]
Flammability	Not a	available.
Lower and upper explosion	Not a	available.

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ower and t limit/flammability limit Vapor pressure

	\ \	/apor Pressu	ire at 20°C	۱ ۱	/apor pres	sure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
toluene	23.17	3.1				
ethylbenzene	9.3	1.2				
xylene	6.7	0.89				
2-methoxy-1-methylethyl acetate	2.7	0.36				
hexamethylene-di-isocyanate	0.01	0.0013				
2,6-di-tert-butyl-p-cresol	0.01	0.0013				
Hexamethylene diisocyanate, oligomers	0.000018	0.0000024	EU A.4			
elative vapor density	: Not ava	ailable.		•	•	•
ensity	: <mark>1</mark> .07 g/	cm ³ [DIN EN	ISO 2811-1]			

Solubility(ies)

Media	Result
cold water	Not soluble [OESO (TG 105)]

Partition coefficient: noctanol/water

: Not applicable.

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Auto-ignition temperature

Ingredient name	°C	°F	Method
Protection of the second se	333	631.4	
xylene	432	809.6	
ethylbenzene	432.22	810	
hexamethylene-di-isocyanate	454	849.2	
toluene	480	896	

Decomposition temperature : Not available.

Kinematic (room temperature): 290 mm²/s (290 cSt) [DIN EN ISO 3219] 2 Kinematic (40°C (104°F)): 101 mm²/s (101 cSt) [DIN EN ISO 3219]

Particle characteristics

Median particle size

: Not applicable.

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 pressurize, 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

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Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene diisocyanate, oligomers	LC50 Inhalation Dusts and mists	Rat	18500 mg/m ³	1 hours
xylene	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
-	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Gas.	Rat	6670 ppm	4 hours
	LD50 Intraperitoneal	Mouse	1548 mg/kg	-
	LD50 Intraperitoneal	Mouse	1548 mg/kg	-
	LD50 Intraperitoneal	Rat	2459 mg/kg	-
	LD50 Oral	Mouse	2119 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Subcutaneous	Rat	1700 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
-	LC50 Inhalation Vapor	Mouse	35500 mg/m ³	2 hours
	LC50 Inhalation Vapor	Rat	55000 mg/m ³	2 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Dermal	Rabbit	17800 uL/kg	-
	LD50 Intraperitoneal	Mouse	2624 uL/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene diisocyanate,	Eyes - Moderate irritant	Rabbit	-	100 mg	-
oligomers				-	
0	Skin - Moderate irritant	Rabbit	-	500 mg	-
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
-	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
-	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	
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Section 11. Toxicological information

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
<mark>ivy</mark> lene ethylbenzene	-	3 2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hexamethylene diisocyanate, oligomers	Category 3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
e thylbenzene	Category 2	-	hearing organs

Aspiration hazard

Name	Result
x ylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure	:	Not available.
Potential acute health effects	<u>s</u>	
Eye contact	:	Causes serious eye irritation.
Inhalation	:	Harmful if inhaled. May cause respiratory irritation.
Skin contact	:	Causes skin irritation. May cause an allergic skin reaction.
la a sti sa	_	No lucation discut affects on evitical because

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristicsEye contact: Adverse symptoms may include the following:

Dete of issue (Dete of multiple)	10/0/0000	
Inhalation	: Adverse symptoms may incluc respiratory tract irritation coughing	le the following:
	pain or irritation watering redness	-

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Section 11. Toxico	ological information
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Delayed and immediate effect	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
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 eff	<u>ects</u>
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.
Reproductive toxicity	: No known significant effects or critical hazards.

Section 12. Ecological information

Т	oxicity	

Product/ingredient name	Result	Species	Exposure
xylene	Acute EC50 90 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 8.5 ppm Marine water	Crustaceans - Palaemonetes pugio - Adult	48 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 16940 µg/l Fresh water	Fish - Carassius auratus	96 hours
	Acute LC50 15700 µg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 20870 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 19000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 4600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 5400 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 13.3 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.97 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
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Section 12. Ecological information

Neonate	
Daphnia - Daphnia magna -	48 hours
Neonate	
Crustaceans - Artemia sp	48 hours
Nauplii	
Crustaceans - Artemia sp	48 hours
Nauplii	
Crustaceans - Cancer magister -	48 hours
Zoea	
Daphnia - Daphnia magna -	48 hours
Neonate	
Daphnia - Daphnia magna -	48 hours
Neonate	
Daphnia - Daphnia magna	48 hours
Fish - Menidia menidia	96 hours
Fish - Morone saxatilis - Juvenile	96 hours
(Fledgling, Hatchling, Weanling)	
Fish - Oncorhynchus mykiss	96 hours
Fish - Pimephales promelas	96 hours
Fish - Pimephales promelas	96 hours
	Daphnia - Daphnia magna - Neonate Crustaceans - Artemia sp Nauplii Crustaceans - Artemia sp Nauplii Crustaceans - Cancer magister - Zoea Daphnia - Daphnia magna - Neonate Daphnia - Daphnia magna - Neonate Daphnia - Daphnia magna Fish - Menidia menidia Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) Fish - Oncorhynchus mykiss Fish - Pimephales promelas

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
✓examethylene diisocyanate, oligomers	5.54	367.7	low
2-methoxy-1-methylethyl acetate	1.2	-	low
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low

Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

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Section 13. Disposal considerations			
Ingredient	CAS #	Status	Reference number
xylene	1330-20-7	Listed	U239

Section 14. Transport information

The information provided in section 14 is based on a bulk package shipment via ground transport in North America. All shippers are responsible for ensuring the proper transportation classification and package/container requirements are followed for the relevant mode of transport.

	DOT Classification	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	Ш	III
Environmental hazards	No.	No.	No.
Additional information			1 25 gal / 421 14 I] Package sizes

DOT Classification : <u>Reportable quantity</u> 992.56 lbs / 450.62 kg [111.25 gal / 421.14 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

 IMDG
 : Emergency schedules
 F-E, _S-E_

 Viscous liquid exception
 This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

 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 : Not available. to IMO instruments

Section 15. Regulatory information

: United States inventory (TSCA 8b):	All components are active or exempted.
(100/100).	
	: United States inventory (TSCA 8b):

State regulations	
Massachusetts	: The following components are listed: XYLENE; ETHYL BENZENE
New York	: The following components are listed: Xylene mixed; Ethylbenzene
New Jersey	: The following components are listed: XYLENES; ETHYL BENZENE
Pennsylvania	: The following components are listed: BENZENE, DIMETHYL-; BENZENE, ETHYL-

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Section 15. Regulatory information

California Prop. 65

MARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Ingredient name	•	Maximum acceptable dosage level	Type of toxicity
ethylbenzene	Yes.	-	Cancer
toluene	-	Yes.	Developmental

Inventory list

Canada

: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

AMMABLE LIQUIDS - Category 3	
	On basis of test data
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

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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 = International Air Transport Association IBC = 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) N/A = Not available SGG = Segregation Group UN = United Nations

✓ Indicates information that has changed from previously issued version.

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Section 16. Other information

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