

SAFETY DATA SHEET

F70-A HARDENER

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

1.1 Product identifier	
Product name	: F70-A HARDENER
SDS code	: 21070100D

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

	Identified uses
Professional use Industrial use	
	Uses advised against
All other uses	
Product use	: Two component coating for interior use.
I.3 Details of the supplier of	the safety data sheet
MAPAERO SAS 10, Avenue de la Rij 09103 PAMIERS Ce France	
e-mail address of person responsible for this SDS	: PSRA_PAMIERS@akzonobel.com
I.4 Emergency telephone nu	mber
Telephone number	: (34).93.484.25.00 (24 h) INTCF +34 915 620 420 (for hazardous products)
<u>Supplier</u>	
Telephone number	: +33 (0)5 34 01 34 01 +33 (0)5 61 60 23 30

Hours of operation

SECTION 2: Hazards identification

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2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]



SECTION 2: Hazards identification

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: 5-5-2023

Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Chronic 2, H411 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

Hazard pictograms Signal word : Danger Hazard statements : Flammable liquid and vapor. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects. Precautionary statements Prevention : Obtain special instructions before use. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF Response INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. 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. Immediately call a POISON CENTER or doctor. : Store in a well-ventilated place. Keep cool. Storage Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations. **Hazardous ingredients** : nitroethane bis-[4-(2,3-epoxipropoxi)phenyl]propane 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane Supplemental label : Not applicable. elements **Annex XVII - Restrictions** : Restricted to professional users. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Date of issue/Date of revision : 6-6-2023 Version : 5

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SECTION 2: Hazards identification

Special packaging requirem	ts	
Containers to be fitted with child-resistant fastenings	Not applicable.	
Tactile warning of danger	Not applicable.	
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	
Other hazards which do not result in classification	None known.	

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
pritroethane	REACH #: 01-2119966158-27 EC: 201-188-9 CAS: 79-24-3	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332 Repr. 2, H361 (inhalation) Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2]
bis-[4-(2,3-epoxipropoxi) phenyl]propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	REACH #: 01-2120078341-60 CAS: 30499-70-8	≥15 - ≤20	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Muta. 2, H341 (oral) Repr. 1B, H360 (oral) Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section. <u>Type</u>

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

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SECTION 4: First aid measures

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

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains bis-[4-(2,3-epoxipropoxi)phenyl]propane, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2- (chloromethyl)oxirane. May produce an allergic reaction.

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SECTION 4: First aid measures

Over-exposure signs/sympto	<u>ms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

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.

SECTION 5: Firefighting measures

: Use dry chemical, CO ₂ , water spray (fog) or foam.
: Do not use water jet.
rom the substance or mixture
: 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. 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.
: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
: 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 5: Firefighting measures

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

contractor.

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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. Do not breathe 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".
6.2 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materials fo	r containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal

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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other
 sections
 See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 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. Avoid exposure during pregnancy. 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 vapor 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
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SECTION 7: Handling and storage

	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.
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.

7.2 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.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne
E2	200 tonne	500 tonne

7.3 Specific end use(s)

Recommendations	: Not available.
Industrial sector specific	: Not available.
solutions	

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredien	t name	Exposure limit values			
nitroethane		National institute of occupational safety and 4/2021). Absorbed through skin. TWA: 62 mg/m ³ 8 hours. TWA: 20 ppm 8 hours. STEL: 312 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes.	d health (Spain,		
Recommended monitoring procedures	atmosphere or k of the ventilation protective equip the following: E the assessment limit values and atmospheres - C of exposure to c (Workplace atm	duct contains ingredients with exposure limits, personal, workplace are or biological monitoring may be required to determine the effect tilation or other control measures and/or the necessity to use respi- equipment. Reference should be made to monitoring standards, ing: European Standard EN 689 (Workplace atmospheres - Guida sment of exposure by inhalation to chemical agents for compariso and measurement strategy) European Standard EN 14042 (Wo res - Guide for the application and use of procedures for the asses re to chemical and biological agents) European Standard EN 482 ce atmospheres - General requirements for the performance of pro- easurement of chemical agents) Reference to national guidance			
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SECTION 8: Exposure controls/personal protection

documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
nitroethane	DNEL	Long term	2 mg/m ³	General	Systemic
		Inhalation	_	population	-
	DNEL	Long term	5 mg/m³	General	Local
		Inhalation		population	
	DNEL	Short term	5 mg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term Inhalation	8.4 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	15 mg/m³	General population	Local
	DNEL	Short term	$17 m a/m^{3}$	Workers	Svotomio
		Inhalation	17 mg/m³		Systemic
	DNEL	Long term Inhalation	25 mg/m³	Workers	Local
	DNEL	Short term Inhalation	50 mg/m³	Workers	Local
	DNEL	Long term Dermal	210 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	350 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	1250 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Dermal	2100 mg/ kg bw/day	Workers	Systemic
bis-[4-(2,3-epoxipropoxi)phenyl] propane	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.75 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m ³	Workers	Systemic
1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2- (chloromethyl)oxirane	DNEL	Long term Dermal	0.67 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.17 mg/m ³	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

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.

Individual protection measures



SECTION 8: Exposure controls/personal protection Wash hands, forearms and face thoroughly after handling chemical products, Hygiene measures 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. : Safety eyewear complying with an approved standard should be used when a risk Eye/face protection 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 : 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. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time >480 minutes according to EN374) is recommended. Recommended gloves: Viton R or Nitrile, thickness ≥ 0.38 mm. When only brief contact is expected, a glove with protection class of 2 or higher (breakthrough time >30 minutes according to EN374) is recommended. Recommended gloves: Nitrile, thickness ≥ 0.12 mm. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. 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. : Personal protective equipment for the body should be selected based on the task **Body protection** 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. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. : Appropriate footwear and any additional skin protection measures should be Other skin protection selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Based on the hazard and potential for exposure, select a respirator that meets the **Respiratory protection** 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. : Emissions from ventilation or work process equipment should be checked to **Environmental exposure** ensure they comply with the requirements of environmental protection legislation. controls In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

<u>Appearance</u>						
Physical state	: Liquid.					
Color	: Colorle	ess.				
Odor	: Chara	cteristic.				
Odor threshold	: Not available.					
Melting point/freezing point	: Not available.					
Initial boiling point and boiling range	: Not available.					
Flammability	: Not av	ailable.				
Lower and upper explosion limit	: Not av	ailable.				
Flash point	: Closed	l cup: 34°C (93.2°F	⁻) [Pensky-Mar	tens]		
Auto-ignition temperature	:					
Ingredient name		°C	°F	Method		
nitroethane		414	777.2			
Decomposition temperature	: Not av	ailable.		·		
рН	: Not av	ailable. [DIN EN 12	262]			

Solubility(ies)

Viscosity

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

Kinematic (40°C): 20 mm²/s [DIN EN ISO 3219]

: Kinematic (room temperature): 9 mm²/s [DIN EN ISO 3219]

Partition coefficient: n-octanol/ : Not applicable. water

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:

Vapor pressure

	Vapor Pressure at 20°C			۱ ۱	Vapor pressure at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
pitroethane	20.9	2.8				
Density	: 1.10)8 g/cm³ [D	DIN EN ISO 2811-1	1]		
Vapor density	: Not	available.				
Particle characteristics						
Median particle size	: Not	applicable				
Percentage of particles with aerodynamic diameter ≤ 10 µm	: 0					



SECTION 10: Stability and reactivity					
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability	: The product is stable.				
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.				
10.4 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.				
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials				
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.				

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pitroethane	LD50 Intraperitoneal	Mouse	310 mg/kg	-
	LD50 Oral	Mouse	860 mg/kg	-
	LD50 Oral	Rat	1100 mg/kg	-
bis-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	20 g/kg	-
	LD50 Intraperitoneal	Mouse	4 g/kg	-
	LD50 Intraperitoneal	Rat	2200 mg/kg	-
	LD50 Oral	Mouse	15600 mg/kg	-
	LD50 Oral	Rabbit	1980 mg/kg	-
	LD50 Oral	Rat	11300 uL/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
S2/21070100D-TRA_HARD_F70	1176.5	N/A	N/A	25.9	N/A
nitroethane	500	N/A	N/A	11	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
øs-[4-(2,3-epoxipropoxi) phenyl]propane	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
h	Skin - Mild irritant	Rabbit	-	500 mg	-
Conclusion/Summary	: Not available.				
<u>Sensitization</u>					
Conclusion/Summary	: Not available.				
<u>Mutagenicity</u>					
Conclusion/Summary	: Not available.				
Carcinogenicity					
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SECTION 11: Toxic	ological information	n	
Conclusion/Summary	: Not available.		
Reproductive toxicity			
Conclusion/Summary	: Not available.		
Teratogenicity			
Conclusion/Summary	: Not available.		
Specific target organ toxi	<u>city (single exposure)</u>		
Not available.			
Specific target organ toxi	<u>city (repeated exposure)</u>		
Not available.			
Aspiration hazard			
Not available.			
Information on the likely routes of exposure	: Not available.		
Potential acute health effect	<u>cts</u>		
Eye contact	: Causes serious eye o	-	
Inhalation	: No known significant	effects or critical hazards.	
Skin contact		. May cause an allergic skin reaction.	
Ingestion	: Harmful if swallowed.		
Sumptomo valatad ta tha n	hypical chamical and taxi	a la sia al abara stariation	
Symptoms related to the p	-	-	
Eye contact	pain watering redness	ay include the following:	
Inhalation	: Adverse symptoms m reduced fetal weight increase in fetal death skeletal malformation		
Skin contact	: Adverse symptoms m pain or irritation redness blistering may occur reduced fetal weight increase in fetal deatl skeletal malformation		
Ingestion	: Adverse symptoms m stomach pains reduced fetal weight increase in fetal death skeletal malformation		
Delayed and immediate eff	ects and also chronic effe	cts from short and long term exposit	ure
Short term exposure			
Potential immediate effects	: Not available.		
Potential delayed effects	s : Not available.		
Long term exposure			
Potential immediate effects	: Not available.		
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SECTION 11: Toxicological information

Potential delayed effects : Not available. Potential chronic health effects

Not available.

Conclusion/Summary	: Not available.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: Suspected of causing genetic defects.
Reproductive toxicity	: May damage fertility or the unborn child.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

No additional information.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
pitroethane	0.18	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K _{oc})	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

<u>Product</u>	
Methods of disposal	: 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.
Hazardous waste	: The classification of the product may meet the criteria for a hazardous waste.
Disposal considerations	 Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
Waste code	Waste designation
EWC 08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Disposal considerations	 Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
Special 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. 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.

SECTION 14: Transport information

	ADR/RID	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN3469	UN3469	UN3469
14.2 UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE	PAINT, FLAMMABLE, CORROSIVE
14.3 Transport hazard class(es)	3 (8)	3 (8)	3 (8)
14.4 Packing group			
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SECTION 14: T	ransport inform	ation		
14.5 Environmental hazards	Yes.	Marine Pollutant(s): pis-[4-(2,3-epoxipropoxi) phenyl]propane, 1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	Yes. The environmentally hazardous substance mark is not required.	
Additional informat	tion			
ADR/RID IMDG	sizes of ≤5 <u>Tunnel co</u> : <u>Emergenc</u> The marine	The environmentally hazardous substance mark is not required when transported is sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$. <u>Tunnel code</u> (D/E) <u>Emergency schedules</u> F-E, S-C The marine pollutant mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ k}$ <u>IMDG Code Segregation group</u> Not applicable		
ΙΑΤΑ	:			
14.6 Special precau user	upright and	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 i the event of an accident or spillage.		
14.7 Maritime trans bulk according to IN instruments		able.		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

VOC for Ready-for-Use Mixture Industrial emissions	Not available.Not listed	
(integrated pollution prevention and control) - Air		
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed	
Ozone depleting substance	<u>es (1005/2009/EU)</u>	1
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Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category			
P5c			

E2

National regulations

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical Safety

: No Chemical Safety Assessment has been carried out.

Assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.
 Abbreviations and : ATE = Acute Toxicity Estimate

acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]		
	DMEL = Derived Minimal Effect Level		
	DNEL = Derived No Effect Level		
	EUH statement = CLP-specific Hazard statement		
	N/A = Not available		
	PBT = Persistent, Bioaccumulative and Toxic		
	PNEC = Predicted No Effect Concentration		
	RRN = REACH Registration Number		
	SGG = Segregation Group		
	vPvB = Very Persistent and Very Bioaccumulative		
– – – – – – – – – – – – – – – – – – –			

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

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	Classification		Justification
Flam. Liq. 3, H226		On	basis of test data
Acute Tox. 4, H302		Ca	lculation method
Skin Corr. 1C, H314		Ca	Iculation method
Eye Dam. 1, H318			Iculation method
Skin Sens. 1, H317			Iculation method
Muta. 2, H341			Iculation method
Repr. 1B, H360			Iculation method
Aquatic Chronic 2, H411			lculation method
ull text of abbreviated H	statements		
1226		Flammable liquid and va	apor.
-1302		Harmful if swallowed.	
H314		Causes severe skin bur	ns and eve damage.
H315		Causes skin irritation.	
H317		May cause an allergic sl	kin reaction
H318		Causes serious eye dan	
H319		Causes serious eye irrita	
H332		Harmful if inhaled.	
H341		Suspected of causing ge	enetic defects
H360		May damage fertility or t	
H361			
H411			fertility or the unborn child.
		Toxic to aquatic life with	
H412		Harmful to aquatic life w	nun long lasung elfects.
Full text of classifications	[CLP/GHS]		
Acute Tox. 4		ACUTE TOXICITY - Cat	
Aquatic Chronic 2			NG-TERM) - Category 2
Aquatic Chronic 3			NG-TERM) - Category 3
Eye Dam. 1			E/ EYE IRRITATION - Category 1
Eye Irrit. 2			E/ EYE IRRITATION - Category 2
Flam. Liq. 3		FLAMMABLE LIQUIDS	
Muta. 2		GERM CELL MUTAGEN	
Repr. 1B		TOXIC TO REPRODUC	CTION - Category 1B
Repr. 2		TOXIC TO REPRODUC	
Skin Corr. 1C		SKIN CORROSION/IRR	
Skin Irrit. 2		SKIN CORROSION/IRR	
Skin Sens. 1		SKIN SENSITIZATION -	
Skin Sens. 1B		SKIN SENSITIZATION -	
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/ersion	: 5		
-	: 5		

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are

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SECTION 16: Other information

subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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