

# 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 MAPAERO SAS 10, Avenue de la Rij 09103 PAMIERS Ce France e-mail address of person	ole CS30098
responsible for this SDS I.4 Emergency telephone nu	ımber
Telephone number	: (12) 411 99 99
<u>Supplier</u>	
Telephone number	: +33 (0)5 34 01 34 01 +33 (0)5 61 60 23 30

SECTION 2: Hazards identification

:

Hours of operation

Product definition	: Mixture		
Classification according to	D Regulation (EC) No. 1272/2	2008 [CLP/GHS]	
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			
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## **SECTION 2: Hazards identification**

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.

## 2.2 Label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>Flammable liquid and vapor. Harmful if swallowed.</li> <li>Causes severe skin burns and eye damage. May cause an allergic skin reaction.</li> <li>Suspected of causing genetic defects.</li> <li>May damage fertility or the unborn child.</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>
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.
Response	: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF 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.
Storage	: Store in a well-ventilated place. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	<ul> <li>mitroethane</li> <li>bis-[4-(2,3-epoxipropoxi)phenyl]propane</li> <li>1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane</li> </ul>
Supplemental label elements	: Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Restricted to professional users.
Special packaging requirem	<u>ients</u>
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.3 Other hazards	

## 2.3 Other hazards

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## SECTION 2: Hazards identification

Product meets the criteria : for PBT or vPvB according vPvB. to Regulation (EC) No. 1907/2006, Annex XIII Other hazards which do : None known.

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

not result in classification

## SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
ntroethane	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	-	[1]
			See Section 16 for the full text of the H statements declared above.		

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. Type

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

## 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.



#### **SECTION 4: First aid measures** 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. : Get medical attention immediately. Call a poison center or physician. Wash with Skin contact 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.

## Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness

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ECTION 4: Firs	
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

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**

5.1 Extinguishing media Suitable extinguishing media	:	Use dry chemical, $CO_2$ , water spray (fog) or foam.
Unsuitable extinguishing media	:	Do not use water jet.
5.2 Special hazards arising f	ron	n the substance or mixture
Hazards from 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.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
5.3 Advice for firefighters		
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. 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.



## **SECTION 6: Accidental release measures**

## 6.1 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. 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 for	r c	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. 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 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.

## **SECTION 7: Handling and storage**

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
-	5000 tonne 200 tonne	50000 tonne 500 tonne

## 7.3 Specific end use(s)

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

## **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/ingredier	it name	Exposure	limit values
nitroethane		Regulation of the Minister of Fa of 18 February 2021, regarding concentrations and values of a work environment (Journal of L 2/2021). Absorbed through skin TWA: 62 mg/m <sup>3</sup> 8 hours. STEL: 186 mg/m <sup>3</sup> 15 minutes.	the highest permissible gents harmful to health in the .aws 2021, item 325) (Poland,
Recommended monitoring procedures	atmosphere or b of the ventilation protective equip the following: E the assessment limit values and atmospheres - ( of exposure to c (Workplace atm for the measure	ontains ingredients with exposure I biological monitoring may be requir on or other control measures and/or ment. Reference should be made uropean Standard EN 689 (Workp of exposure by inhalation to chem measurement strategy) Europear Guide for the application and use o chemical and biological agents) Eu- pospheres - General requirements ment of chemical agents) Referent nethods for the determination of ha	red to determine the effectiveness the necessity to use respiratory to monitoring standards, such as place atmospheres - Guidance for nical agents for comparison with n Standard EN 14042 (Workplace of procedures for the assessment uropean Standard EN 482 for the performance of procedures nce to national guidance
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Product/ingredient name	Туре	Exposure	Value	Population	Effects
froethane	DNEL	Long term	2 mg/m <sup>3</sup>	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	8.4 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			
	DNEL	Short term	15 mg/m³	General	Local
		Inhalation		population	
	DNEL	Short term	17 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term	25 mg/m³	Workers	Local
		Inhalation			
	DNEL	Short term	50 mg/m³	Workers	Local
		Inhalation	- / - //	<b>a</b> .	
	DNEL	Long term Dermal	210 mg/kg	General	Systemic
			bw/day	population	0
	DNEL	Long term Dermal	350 mg/kg	Workers	Systemic
			bw/day	0	0
	DNEL	Short term Dermal	1250 mg/	General	Systemic
		Short tarm Darmal	kg bw/day	population	Sustamia
	DNEL	Short term Dermal	2100 mg/ kg bw/day	Workers	Systemic
his [1 (2.3 anavinranavi)nhand	DNEL	Long term Dermal		General	Systemic
pis-[4-(2,3-epoxipropoxi)phenyl]	DINEL		89.3 µg/kg bw/day	population	Systemic
propane	DNEL	Long term Oral	0.5 mg/kg	General	Systemic
	DINEL		bw/day	population	Systemic
	DNEL	Long term Dermal	0.75 mg/	Workers	Systemic
		Long term Derma	kg bw/day	VV OINEIS	Cysternic
	DNEL	Long term	0.87 mg/m <sup>3</sup>	General	Systemic
		Inhalation	0.07 mg/m	population	Cysternie
	DNEL	Long term	4.93 mg/m <sup>3</sup>		Systemic
		Inhalation			Systemic
1,3-Propanediol, 2-ethyl-2-	DNEL	Long term Dermal	0.67 mg/	Workers	Systemic
(hydroxymethyl)-, polymer with 2-			kg bw/day		- Jotonno
(chloromethyl)oxirane					
	DNEL	Long term	1.17 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation	0		

## **PNECs**

No PNECs available.

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8.2 Exposure controls Appropriate engineering controls Individual protection meas	ventilation or other en contaminants below a controls also need to explosive limits. Use	ate ventilation. Use process enclosures, local exhaust ngineering controls to keep worker exposure to airborne any recommended or statutory limits. The engineering keep gas, vapor or dust concentrations below any lower explosion-proof ventilation equipment.	
Hygiene measures	: Wash hands, forearm before eating, smokin Appropriate technique Contaminated work c contaminated clothing	ns and face thoroughly after handling chemical products, ng and using the lavatory and at the end of the working perio es should be used to remove potentially contaminated clothi clothing should not be allowed out of the workplace. Wash g before reusing. Ensure that eyewash stations and safety the workstation location.	
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ECTION 8: Exposur	e controls/personal protection
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	
Hand protection	: 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 ® or Nitrile, thickness $\geq$ 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 $\geq$ 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.
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. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
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.
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.

## **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	: Colorless.		
Odor	: Characteristic.		
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nd c	hemical pro	perties		
: N	lot available.			
: N	lot available.			
: N	lot available.			
: N	lot available.			
: N	lot available.			
: C	losed cup: 34°C (	3.2°F) [Pensky-M	artens]	
:				
	°C	°F	Method	
	414	777.2		
: N	lot available.	I		
: N	lot available. [DIN	EN 1262]		
:				
	Result			
	Not soluble [OES0	D (TG 105)]		
	: N : N : N : N : C : :	<ul> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Closed cup: 34°C (Signal Contemposition of the second secon</li></ul>	<ul> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Closed cup: 34°C (93.2°F) [Pensky-M</li> <li>Closed cup: 34°C (93.2°F) [Pensky-M</li> <li>Closed cup: 34°C (93.2°F)</li> <li>Closed cup: 34°C (93.2°F)</li> <li>Closed cup: 34°C (93.2°F)</li> <li>Closed cup: 34°C (93.2°F)</li> <li>Pensky-M</li> <li>Closed cup: 34°C (93.2°F)</li> <li>Pensky-M</li> <li>Not available.</li> <li>Interventional (100 mm)</li> <li>Kinematic (room temperature): 9 mm<sup>2</sup></li> <li>Kinematic (40°C): 20 mm<sup>2</sup>/s [DIN EN</li> <li>Result</li> </ul>	<ul> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Closed cup: 34°C (93.2°F) [Pensky-Martens]</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Kinematic (room temperature): 9 mm²/s [DIN EN ISO 3219] Kinematic (40°C): 20 mm²/s [DIN EN ISO 3219]</li> <li>Result</li> </ul>

## Vapor pressure

:

	Vapor Pressure at 20°C			\ \	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	IN EN ISO 2811-1	]			
/apor density	: Not	available.					
Particle characteristics							
Median particle size	: Not	applicable.					
Percentage of particles with aerodynamic diameter ≤ 10 μm	<b>i</b> : 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.			

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SECTION 10: Stability and reactivity		
<b>10.5 Incompatible materials</b> : Reactive or incompatible with the following materials: oxidizing materials		

**10.6 Hazardous**: Under normal conditions of storage and use, hazardous decomposition productsdecomposition productsshould 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
pítroethane	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	
s-[4-(2,3-epoxipropoxi)	Eyes - Severe irritant	Rabbit	-	24 hours 2	-	
phenyl]propane	Oldin Milel inside at	Dabbit		mg		
	Skin - Mild irritant	Rabbit	-	500 mg	-	
Conclusion/Summary	: Not available.					
<u>Sensitization</u>						
<b>Conclusion/Summary</b>	: Not available.					
<u>Mutagenicity</u>						
Conclusion/Summary	: Not available.	: Not available.				
<b>Carcinogenicity</b>						
Conclusion/Summary	: Not available.					
Reproductive toxicity						
Conclusion/Summary	: Not available.					
Teratogenicity						
Conclusion/Summary	: Not available.					
Specific target organ toxicit	<u>y (single exposure)</u>					
Not available.						
Specific target organ toxicit	<u>y (repeated exposure)</u>					
Not available.						

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# SECTION 11: Toxicological information

## Aspiration hazard

Not available.

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye damage.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes severe burns. May cause an allergic skin reaction.
Ingestion	:	Harmful if swallowed.
Symptoms related to the phy	sic	al, chemical and toxicological characteristics
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

## Delayed and immediate effects and also chronic effects from short and long term exposure

<u>Short term exposure</u>		
Potential immediate effects	ot available.	
Potential delayed effects	ot available.	
Long term exposure		
Potential immediate effects	ot available.	
Potential delayed effects	ot available.	
Potential chronic health eff		
Not available.		
Conclusion/Summary	ot available.	
General	nce sensitized, a severe allergic reaction may occur when subs very low levels.	equently exposed
Carcinogenicity	o known significant effects or critical hazards.	
Mutagenicity	uspected of causing genetic defects.	
Reproductive toxicity	ay damage fertility or the unborn child.	
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# **SECTION 11: Toxicological information**

## 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
pítroethane	0.18	-	low

#### 12.4 Mobility in soil

Soil/water partition coefficient (K <sub>oc</sub> )	: 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.

## **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	Disposal of this produc with the requirements any regional local auth products via a licensed	te should be avoided or minimized whe st, solutions and any by-products should of environmental protection and waste of ority requirements. Dispose of surplus I waste disposal contractor. Waste sho unless fully compliant with the requirem	I at all times comply disposal legislation and and non-recyclable ould not be disposed of
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longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

SECTION 13: Disposal considerations		
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

#### European waste catalogue (EWC)

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

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	<ul> <li>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.</li> </ul>
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	IATA	
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	111	111	111	
14.5 Environmental hazards	Yes.	Marine Pollutant(s): bis-[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 information         ADR/RID       : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.         Tunnel code (D/E)				
IMDG	: Emergency sched			

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SECTION 14: Transp	ort information
	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg IMDG Code Segregation group Not applicable
ΙΑΤΑ	: The environmentally hazardous substance mark may appear if required by other transportation regulations.
14.6 Special precautions for user	<ul> <li>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.</li> </ul>
14.7 Maritime transport in bulk according to IMO instruments	: Not applicable.
SECTION 15: Regula	itory information
EU Regulation (EC) No. 190	nces subject to authorization
Substances of very high None of the components a	
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Restricted to professional users.
Other EU regulations	
VOC	: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.
VOC for Ready-for-Use Mixture	: Not available.
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Ozone depleting substance	<u>es (1005/2009/EU)</u>
Not listed.	
Prior Informed Consent (P	<u>'IC) (649/2012/EU)</u>
Not listed.	
Persistent Organic Polluta Not listed.	<u>ints</u>
<u>Seveso Directive</u>	
This was doned in a sufficient of	

This product is controlled under the Seveso Directive.

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# **SECTION 15: Regulatory information**

Danger criteria	
Category	
P5c E2	
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

to the use of this product at work.

legislation. The provisions of the national health and safety at work regulations apply

### 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 acronyms	<ul> <li>ATE = Acute Toxicity Estimate 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</li> </ul>

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1C, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 2, H341	Calculation method
Repr. 1B, H360	Calculation method
Aquatic Chronic 2, H411	Calculation method

## Full text of abbreviated H statements

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H226 H302 H314 H315 H317 H318 H319 H332 H341 H360 H361 H411 H412		Flammable liquid and vapor. Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. Suspected of causing genetic defects. May damage fertility or the unborn child. Suspected of damaging fertility or the unborn child. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
Full text of classifications	[CLP/GHS]	
Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 3 Muta. 2 Repr. 1B Repr. 2 Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1		ACUTE TOXICITY - Category 4 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B TOXIC TO REPRODUCTION - Category 2 SKIN CORROSION/IRRITATION - Category 1C SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1
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Notice to reader		

#### Notice to reader FOR PROFESSIONAL USE ONLY

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 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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