

SAFETY DATA SHEET

F69 HARDENER

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

1.1 Product identifier

Product name: F69 HARDENERSDS code: 21069000D

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

	Identified uses
Paint. Professional use Industrial use	
Industrial applications, Professional applications.	
Product use	: Two component coating for interior use.

1.3 Details of the supplier of the safety data sheet

MAPAERO SAS 10, Avenue de la Rijo 09103 PAMIERS Ce	
France	
e-mail address of person responsible for this SDS	: PSRA_PAMIERS@akzonobel.com
Original preparation date	: 9/30/2022

1.4 Emergency telephone number

National advisory body/Poison Center Telephone number : Zehir Danışma Merkezi-UZEM-Ankara- : 114 Supplier : +22 (0)5 24 01 24 01

l elephone number	: +33 (0)5 34 01 34 01 +33 (0)5 61 60 23 30
Hours of operation	:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to regulation SEA: RG.-11/12/2013-28848

Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation SEA: RG.-11/12/2013-28848.

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.

F69 HARDENER		
SECTION 2: Hazards	ic	lentification
2.2 Label elements		
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. Use personal protective equipment as required. 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. 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	:	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin nitroethane 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane [3-(2,3-epoxypropoxy)propyl]trimethoxysilane
Supplemental label elements	:	Contains epoxy constituents. May produce an allergic reaction.
Special packaging requirem	en	<u>ts</u>
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	:	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.

F69 HARDENER

SECTION 3: Composition/information on ingredients

. .. .

Product/ingredient name	Identifiers	%	SEA: RG. -11/12/2013-28848	Туре
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin	EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
nitroethane	CAS: 79-24-3 Index: 609-035-00-1	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332	[1] [2]
1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2- (chloromethyl)oxirane	CAS: 30499-70-8	≥10 - ≤25	Skin Corr. 1C, H314 Skin Sens. 1B, H317 Muta. 2, H341 (oral) Repr. 1B, H360 (oral) Aquatic Chronic 2, H411	[1]
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	EC: 219-784-2 CAS: 2530-83-8	≤5	Eye Dam. 1, H318 See Section 16 for	[1]
			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 or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT
- [4] Substance meets the criteria for vPvB
- [5] Additional disclosure due to company policy

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.
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.

F69 HARDENER

FO9 HARDENER			
SECTION 4: First aid measures			
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. 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.		
	ms and effects, both acute and delayed		
Potential acute health effe			
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.		
<u>Over-exposure signs/sym</u>	<u>ptoms</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.

F69 HARDENER

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	from 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 thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
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, pro	tective 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 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 contractor.

F69 HARDENER

SECTION 6: Accidental release measures		
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

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.
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	

F69 HARDENER

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredier	Product/ingredient name		Exposure limit values			
nitroethane		EU OEL (Europe, 10/2 of indicative occupat STEL: 100 ppm 15 m STEL: 312 mg/m ³ 15 TWA: 20 ppm 8 hours TWA: 62 mg/m ³ 8 hou	ional exposure limit v inutes. minutes. s.		st	
Recommended monitoring procedures	atmosphere or h 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 piological monitoring ma or other control measurement. Reference shoul uropean Standard EN 6 of exposure by inhalati measurement strategy Guide for the application chemical and biological pospheres - General requirement of chemical agent methods for the determine	ay be required to deterr ures and/or the necessi Id be made to monitorin 589 (Workplace atmosp on to chemical agents) European Standard E n and use of procedure agents) European Stan uirements for the perfo ts) Reference to nation	mine the effectivenes ity to use respiratory ng standards, such a oheres - Guidance fo for comparison with EN 14042 (Workplac s for the assessmen ndard EN 482 ormance of procedur nal guidance	res	
8.2 Exposure controls						
Appropriate engineering controls	ventilation or ot contaminants b controls also ne	dequate ventilation. Us her engineering control- elow any recommended eed to keep gas, vapor o . Use explosion-proof v	s to keep worker expos d or statutory limits. Th or dust concentrations	sure to airborne ne engineering		
Individual protection measu	res					
Hygiene measures	before eating, s Appropriate tec Contaminated v contaminated o	prearms and face thorous moking and using the lash hniques should be used work clothing should no dothing before reusing. tose to the workstation lo	avatory and at the end d to remove potentially t be allowed out of the Ensure that eyewash s	of the working perio contaminated clothin workplace. Wash		
Eye/face protection	assessment inc gases or dusts. unless the asse	complying with an app dicates this is necessary If contact is possible, t essment indicates a high face shield. If inhalatio d.	y to avoid exposure to l the following protection her degree of protection	iquid splashes, mist n should be worn, n: chemical splash	s,	
Skin protection						
Hand protection	be worn at all ti this is necessau check during us should be noted different for diff	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	being performe before handling wear anti-static discharges, clo European Stan	ctive equipment for the l d and the risks involved this product. When the protective clothing. Fo thing should include and dard EN 1149 for furthe nd test methods.	I and should be approv ere is a risk of ignition f r the greatest protectio ti-static overalls, boots	red by a specialist from static electricity n from static and gloves. Refer to	Ι,	
Date of revision	:21-10-2022 Or	iginal preparation date	: 30-9-2022	Version : 2.01	7/14	

F69 HARDENER

SECTION 8: Exposure controls/personal protection			
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

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Colorless.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: 47°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Greatest known range: Lower: 3.4% Upper: 7% (nitroethane)
Vapor pressure	: Not available.
Vapor density	: Highest known value: 2.6 (Air = 1) (1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane). Weighted average: 2.17 (Air = 1)
Density	: 1.117 g/cm ³
Solubility(ies)	: Insoluble in the following materials: cold water.
Upper/lower flammability or explosive limits	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): 0.09 cm ² /s Kinematic (40°C): 0.2 cm ² /s

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.

F69 HARDENER

SECTION 10: Stability and reactivity			
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials		
10.6 Hazardous	: Under normal conditions of storage and use, hazardous decomposition products		

decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
nitroethane	LD50 Intraperitoneal	Mouse	310 mg/kg	-
	LD50 Oral	Mouse	860 mg/kg	-
	LD50 Oral	Rat	1100 mg/kg	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	LD50 Dermal	Rabbit	3970 uL/kg	-
,	LD50 Oral	Rat	7.01 g/kg	-
	LD50 Oral	Rat	22600 uĽ/kg	-

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol- A-(epichlorhydrin); epoxy	Eyes - Mild irritant	Rabbit	-	100 mg	-
resin					
	Skin - Moderate irritant	Rabbit	-	24 hours 500 Ul	-
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Eyes - Mild irritant	Rabbit	-	mg 100 mg	-
	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		
Conclusion/Summary	:	Not available.
Reproductive toxicity		
Conclusion/Summary	:	Not available.
Teratogenicity		
Conclusion/Summary	:	Not available.
Specific target organ toxicit	t y (:	<u>single exposure)</u>
Not available		

Not available.

<u>Specific target organ toxicity (repeated exposure)</u> Not available.

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health effects

Date of revision

F69 HARDENER				
SECTION 11: Toxico	logical information			
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	sical, 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 effect Short term exposure	ts and also chronic effects from short and long term exposure			
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Long term exposure				
Potential immediate effects	: Not available.			
Potential delayed effects	: Not available.			
Potential chronic health effe	ects			
Not available.				
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.			
Other information	: Not available.			

F69 HARDENER

SECTION	12:	Ecological	information
---------	-----	-------------------	-------------

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
reaction product: bisphenol- A-(epichlorhydrin); epoxy	2.64 to 3.78	31	low
resin nitroethane	0.18	-	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: 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 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).

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.

13.1 Waste treatment methods

Product

- Methods of Disposal
- : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable 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.

F69 HARDENER

ADR/RID IMDG IATA 14.1 UN number UN3469 UN3469 UN3469 14.2 UN proper shipping name PAINT, FLAMMABLE, CORROSIVE PAINT, FLAMMABLE, CORROSIVE PAINT, FLAMMABLE, CORROSIVE PAINT, FLAMMABLE, CORROSIVE 14.3 Transport hazard class(es) 3 (8) 3 (8) 3 (8) 3 (8) 14.4 Packing group III III III III 14.5 Yes. Marine Pollutant(s): reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, 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) : The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO : Not available.	SECTION 14: Transport information			
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) 3 (8) 14.4 Packing group III III III III III 14.5 Environmental hazards Yes. Marine Pollutant(s): reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, 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 s5 L or s5 kg. Tunnel code (D/E) : The environmentally hazardous substance mark is not required when transported in sizes of s5 L or s5 kg. Tunnel code (D/E) IMDG : Emergency schedules F-E, S-C The marine pollutant mark is not required when transported in sizes of s5 L or s5 kg. 14.6 Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transportin closed containers that are upright and secure. Ensure that persons transport in closed containers that are upright and secure. Ensure that persons transport in closed containers that are upright and secure. Ensure that persons transport in closed containers that are upright and secure. Ensure that persons transport in closed containers that are upright and secure. Ensure that persons transport in closed containers that are upright and secure. Ensure that persons transport in c			IMDG	ΙΑΤΑ
shipping name CORROSIVE CORROSIVE CORROSIVE 14.3 Transport hazard class(es) 3 (8) 3 (8) 3 (8) 3 (8) 14.4 Packing group III III III III III 14.5 Environmental hazards Yes. Marine Pollutant(s): reaction product: bisphenol-A- (epichlorhydrin): epoxy resin, 17.3-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) : The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO instruments : Not available.	14.1 UN number	UN3469	UN3469	UN3469
hazard class(es)				
group Yes. Marine Pollutant(s): reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, 1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane Yes. The environmentally hazardous substance mark is not required. Additional information If the environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (D/E) If the environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (D/E) IMDG : Emergency schedules F-E, S-C The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO instruments : Not available.		3 (8)		3 (8)
Environmental hazards reaction product: bisphenol-A-(epichlorhydrin); epoxy resin, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane 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 IMDG : Emergency schedules F-E, S-C The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Tunnel code (D/E) F-E, S-C IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO instruments : Not available.	-	111	111	111
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 schedules F-E, S-C The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO instruments : Not available.	Environmental	Yes.	reaction product: bisphenol-A- (epichlorhydrin); epoxy resin, 1,3-Propanediol, 2-ethyl-2- (hydroxymethyl)-, polymer	hazardous substance mark is
IATA The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg IATA The environmentally hazardous substance mark may appear if required by other transportation regulations. 14.6 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. 14.7 Transport in bulk according to IMO instruments Not available.	ADR/RID: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.			
14.6 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. 14.7 Transport in bulk according to IMO instruments : Not available.	IMDG			sported in sizes of ≤5 L or ≤5 kg.
 user upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. 14.7 Transport in bulk : Not available. according to IMO instruments 	ΙΑΤΑ	IATA : The environmentally hazardous substance mark may appear if required by other		
according to IMO instruments	ser upright and secure. Ensure that persons transporting the product know what to			
SECTION 15: Regulatory information	14.7 Transport in bulk : Not available. according to IMO instruments			

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>30105 sayılı, Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması Hakkında Yönetmelik.</u> <u>28733 sayılı, Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik.</u> <u>28730 sayılı, Kanserojen ve Mutajen Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik.</u> <u>6331 sayılı, İş Sağlığı ve Güvenliği Kanunu.</u> <u>29314 sayılı, Atık Yönetimi Yönetmeliği.</u> <u>Seveso Directive</u> This product is controlled under the Seveso Directive.

Danger criteria

	Category
	P5c
	E2
_	

Regulation 30105 KKDIK

Annex XIV - List of substances subject to authorization Annex XIV

Date of revision

F69 HARDENER

SECTION 15: Regulatory information			
None of the components are listed.			
Substances of very high concern			
None of the components are	listed.		
KKDIK, Annex XVII - : Restrictions on the Manufacture, Place on the Market and Use of Certain Hazardous Substances, Mixtures and Articles	Restricted to professional users.		
Ozone depleting substances (1005/2009/EU)			
Not listed.			
Prior Informed Consent (PIC) Not listed.	<u>(649/2012/EU)</u>		
National inventory			
Australia :	Not determined.		
	All components are listed or exempted.		
China :	Not determined.		
Europe :	Not determined.		
Japan :	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.		
New Zealand :	Not determined.		
Philippines :	Not determined.		
Republic of Korea :	Not determined.		
Taiwan :	Not determined.		
Thailand :	Not determined.		
Turkey :	Not determined.		
United States :	All components are active or exempted.		
Viet Nam :	Not determined.		
SECTION 16: Other information			
Indicates information that has	Indicates information that has changed from previously issued version.		

	5 1 5	
Abbreviations and	: ATE = Acute Toxicity Estimate	
acronyms	EUH statement = SEA-specific Hazard statement	
-	N/A = Not available	
	PBT = Persistent, Bioaccumulative and Toxic	
	PNEC = Predicted No Effect Concentration	
	SGG = Segregation Group	
	vPvB = Very Persistent and Very Bioaccumulative	

Procedure used to derive the classification according to regulation SEA: RG.-11/12/2013-28848

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Skin Corr. 1C, H314	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

F69 HARDENER

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

Date of issue/ Date of revision	: 21 October 2022
Date of previous issue	: 4 October 2022
Version	: 2.01
Unique ID	:

Contact information of certified author

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.

Brand names mentioned in this data sheet are trademarks of or are licensed to Akzo Nobel.