

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

SAFETY DATA SHEET

FRS-40 SEMI-GLOSS BASE SILVER METAL B636

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

1.1 Product identifier

Product name SDS code

: FRS-40 SEMI-GLOSS BASE SILVER METAL B636 : 4092B636B

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

	Identified uses
Paint. Professional us	e Industrial use
	Uses advised against
All other uses	
Product use	: Solvent borne coating for interior use.

1.3 Details of the supplier of the safety data sheet

MAPAERO SAS 10, Avenue de la Rijole CS30098 09103 PAMIERS Cedex France e-mail address of person : PSRA PAMIERS@akzonobel.com

1.4 Emergency telephone number

responsible for this SDS

National advisory body/Poison Center

Mational advisory bodyn of	Son Ocnter	
Telephone number	: +358 (0)9 47197	7
<u>Supplier</u>		
Telephone number	: +33 (0)5 34 01 34 +33 (0)5 61 60 23	
	+33 (0)5 01 00 2	5 30
Hours of operation	:	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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Date of previous issue	: No previous validation	1/20	AkzoNobel

SECTION 2: Hazards identification

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

2.2 Label elements	_			
Hazard pictograms	:			
Signal word	:	Warning		
Hazard statements	:	Suspected of causing cance May cause damage to orga	auses skin irritation.	
Precautionary statements				
Prevention	:	and eye or face protection. flames and other ignition so	before use. Wear protective glov Keep away from heat, hot surfac urces. No smoking. Avoid relea h hands thoroughly after handlin	ces, sparks, open se to the environment.
Response	:	IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.		
Storage	:	Store in a well-ventilated pla	ace. Keep container tightly closed	d. Keep cool.
Disposal	:	Dispose of contents and container in accordance with all local, regional, natio and international regulations.		al, regional, national
Hazardous ingredients	:	n-butyl acetate Reaction mass of ethylbenzene and xylene 4-methylpentan-2-one Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)		atics (2-25%)
Supplemental label elements	:	Contains 4-morpholinecarbaldehyde and methyl methacrylate. May produce an allergic reaction.		te. May produce an
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.		
Special packaging requirem	<u>1en</u>	<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 according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not conta vPvB.	in any substances that are asse	ssed to be a PBT or a
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Date of previous issue		: No previous validation	2/20	AkzoNobe

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SECTION 2: Hazards identification

Other hazards which do : None known. not result in classification

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture				
Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
Reaction mass of ethylbenzene and xylene	REACH #: 01-2119488216-32 EC: 905-588-0	≥10 - ≤15	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
4-methylpentan-2-one	EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≤5	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	[1] [2]
aromatic hydrocarbons, C9	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0	≤2	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	REACH #: 01-2119458049-33 EC: 919-446-0	≤3	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
4-morpholinecarbaldehyde	EC: 224-518-3	<1	Skin Sens. 1, H317	[1]
methyl methacrylate	CAS: 4394-85-8 REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
cyclohexanone	REACH #: 01-2119453616-35 EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	≤0.1	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1] [2]
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SECTION 3: Composition/information on ingredients

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. <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 according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] 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	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	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. Get medical attention. If necessary, call a poison center or physician. 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.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or 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.

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.

Date of issue/Date of revision	: 1-10-2022	Version : 1
Date of previous issue	: No previous validation	4/20



SECTION 4: First aid measures

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 4-morpholinecarbaldehyde, methyl methacrylate. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

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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 mi	ixture	
Hazards from the substance or mixture	In a fire or if heated, a the risk of a subseque lasting effects. Fire w	vapor. Runoff to sewer may create fire or explosion haz a pressure increase will occur and the container may burs ent explosion. This material is harmful to aquatic life with vater contaminated with this material must be contained a discharged to any waterway, sewer or drain.	st, with h long
Hazardous combustion products	: Decomposition production carbon dioxide carbon monoxide metal oxide/oxides	cts may include the following materials:	
5.3 Advice for firefighters			
Special protective actions for fire-fighters	there is a fire. No act suitable training. Mov	cene by removing all persons from the vicinity of the inci ion shall be taken involving any personal risk or without /e containers from fire area if this can be done without ris eep fire-exposed containers cool.	
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SECTION 5: Firefight	ting 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.

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
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.
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 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). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe 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



SECTION 7: Handling and storage

retain product residue and can be hazardous. Do not reuse container.

occupational hygiene hat eat equ	ting, drinking and smoking should be prohibited in areas where this material is ndled, stored and processed. Workers should wash hands and face before ting, drinking and smoking. Remove contaminated clothing and protective uipment before entering eating areas. See also Section 8 for additional promation on hygiene measures.
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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

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		
n-butyl acetate		Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). STEL: 960 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 720 mg/m ³ 8 hours. TWA: 150 ppm 8 hours.
Reaction mass of ethylbenzene and	xylene	Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 440 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
2-methoxy-1-methylethyl acetate		Institute of Occupational Health, Ministry of Social Affairs (Finland, 6/2018). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 270 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 550 mg/m ³ 15 minutes.
4-methylpentan-2-one		Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). STEL: 210 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 80 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
Date of issue/Date of revision : 1-	10-2022	Version : 1

Date of issue/Date of revision	: 1-10-2022	Version :1	
Date of previous issue	: No previous validation	7/20	AkzoNobel

SECTION 8: Exposure controls/personal protection

methyl methacrylate	Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). STEL: 210 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 42 mg/m ³ 8 hours.
	TWA: 10 ppm 8 hours.
cyclohexanone	Institute of Occupational Health, Ministry of Social Affairs (Finland, 12/2019). Absorbed through skin. STEL: 82 mg/m ³ 15 minutes. STEL: 20 ppm 15 minutes. TWA: 41 mg/m ³ 8 hours. TWA: 10 ppm 8 hours.
Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Long term Oral	3.4 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	3.4 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	12 mg/m ³	General	Systemic
		Inhalation	J	population	,
	DNEL	Long term	48 mg/m³	Workers	Systemic
		Inhalation			-)
	DNEL	Long term	102.34 mg/	General	Local
	DIVLL	Inhalation	m ³	population	Loodi
	DNEL			Workers	Local
	DINEL	Long term	480 mg/m ³	WUIKEIS	LUCAI
		Inhalation	950 7 mg/	Conorol	
	DNEL	Short term	859.7 mg/	General	Local
		Inhalation	m ³	population	
	DNEL	Short term	859.7 mg/	General	Systemic
		Inhalation	m ³	population	
	DNEL	Short term	960 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	960 mg/m³	Workers	Systemic
		Inhalation			
Reaction mass of ethylbenzene and	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
xylene		-	bw/day	population	
•	DNEL	Long term	14.8 mg/m ³	General	Systemic
		Inhalation	J	population	,
	DNEL	Long term	77 mg/m³	Workers	Systemic
		Inhalation	g ,		- ,
	DNEL	Long term Dermal	108 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
		Long term Dernial	bw/day	VV UINCI 3	Cysternic
	DNEL	Short term	289 mg/m ³	Workers	Local
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4-methylpentan-2-one PNEL Short term Oral 298 mg/m ² Workers Systemic Inhalation DNEL Long term Oral 4.2 mg/kg General Systemic bwday DNEL Long term Dermal 11.8 mg/m ² General Systemic population DNEL Long term Dermal 11.8 mg/m ² General Systemic population DNEL Long term 14.7 mg/m ² General Systemic inhalation DNEL Long term 83 mg/m ³ Workers Systemic inhalation DNEL Long term 83 mg/m ³ Workers Systemic inhalation DNEL Long term 155.2 mg/ inhalation DNEL Short term 208 mg/m ³ Workers Systemic inhalation DNEL Short term 208 mg/m ³ Workers Systemic inhalation DNEL Short term 208 mg/m ³ Workers Systemic inhalation DNEL Long term 208 mg/m ³ Workers Systemic inhalation DNEL Short term 208 mg/m ³ Workers Systemic inhalation DNEL Long term 74.3 mg/m ³ General Systemic population Systemic population Systemic DNEL Long term 74.3 mg/m ³ General Systemic population DNEL Long term 74.3 mg/m ³ General Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population Systemic population DNEL Long term 208 mg/m ³ Workers Systemic population DNEL Long term 208 mg/m ³ Workers Systemic population DNEL Long term 208 mg/m ³ Workers Systemic population DNEL Long term 208 mg/m ³ Workers Systemic population Systemic	ECTION 8: Exposure c	ontrols/p	-	ction		1
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: No previous validation



SECTION 8: Exposure controls/	personal prot	ection		
	Inhalation		population	
DNEL	Short term Inhalation	20 mg/m ³	General population	Systemic
DNEL	Short term Inhalation	40 mg/m ³	General population	Local
DNEL	Long term Inhalation	40 mg/m ³	Workers	Local
DNEL	Long term Inhalation	40 mg/m ³	Workers	Systemic
DNEL	Short term Inhalation	80 mg/m³	Workers	Local
DNEL	Short term Inhalation	80 mg/m³	Workers	Systemic

PNECs

No PNECs available.

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8.2 Exposure controls			
Appropriate engineering controls	ventilation or other e contaminants below controls also need to	ate ventilation. Use process enclosures, local exhaust ngineering controls to keep worker exposure to airborne any recommended or statutory limits. The engineering b keep gas, vapor or dust concentrations below any lower e explosion-proof ventilation equipment.	
Individual protection mean	<u>sures</u>		
Hygiene measures	before eating, smoki Appropriate techniqu Wash contaminated	ns and face thoroughly after handling chemical products, ng and using the lavatory and at the end of the working per les should be used to remove potentially contaminated clot clothing before reusing. Ensure that eyewash stations and close to the workstation location.	thing.
Eye/face protection	assessment indicate gases or dusts. If co	plying with an approved standard should be used when a r s this is necessary to avoid exposure to liquid splashes, m ontact is possible, the following protection should be worn, ent indicates a higher degree of protection: chemical splas	ists,
Skin protection			
Hand protection	be worn at all times wern at all times wern at all times were this is necessary. Concern the check during use the should be noted that different for differe	mpervious gloves complying with an approved standard sh when handling chemical products if a risk assessment indic onsidering the parameters specified by the glove manufact at the gloves are still retaining their protective properties. It the time to breakthrough for any glove material may be glove manufacturers. In the case of mixtures, consisting of the protection time of the gloves cannot be accurately	cates turer, t
	protection class of 6 recommended. Rec When only brief cont (breakthrough time > Recommended glove	requently repeated contact may occur, a glove with a (breakthrough time >480 minutes according to EN374) is ommended gloves: Viton $@$ or Nitrile, thickness ≥ 0.38 mm act is expected, a glove with protection class of 2 or higher 30 minutes according to EN374) is recommended. es: Nitrile, thickness ≥ 0.12 mm.	r
		effectiveness of the glove may be reduced by physical/ nd poor maintenance.	
	product is the most a	that the final choice of type of glove selected for handling appropriate and takes into account the particular conditions ne user's risk assessment.	
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SECTION 8: Exposure controls/personal protection

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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

9.1 Information on basic physical and chemical properties

<u>Appearance</u>		
Physical state	iid.	
Color	er.	
Odor	racteristic.	
Odor threshold	available.	
рН	available.	
Melting point/freezing point	available.	
Initial boiling point and	available.	
boiling range		
Flash point	sed cup: 28°C	
Evaporation rate	available.	
Flammability (solid, gas)	available.	
Upper/lower flammability or explosive limits	available.	
Vapor pressure	available.	
Vapor density		ue: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). : 4.01 (Air = 1)
Density	68 g/cm³	
Solubility(ies)	luble in the fol	lowing materials: cold water.
Partition coefficient: n-octanol/ water	available.	
Auto-ignition temperature	available.	
Decomposition temperature	available.	
Viscosity	ematic (room te ematic (40°C):	emperature): 10.33 cm²/s 1.01 cm²/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.
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 toxicological effects

Acute toxicity

		Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
-	LC50 Inhalation Vapor	Mouse	6 g/m³	2 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
	LD50 Oral	Guinea pig	4700 mg/kg	-
	LD50 Oral	Mouse	6 g/kg	-
	LD50 Oral	Rabbit	3200 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Reaction mass of	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
ethylbenzene and xylene				
4-methylpentan-2-one	LD50 Intraperitoneal	Guinea pig	800 mg/kg	-
,	LD50 Intraperitoneal	Mouse	268 mg/kg	-
	LD50 Intraperitoneal	Rat	400 mg/kg	-
	LD50 Oral	Guinea pig	1600 mg/kg	_
	LD50 Oral	Mouse	1900 mg/kg	-
	LD50 Oral	Mouse	2850 mg/kg	-
	LD50 Oral	Rat	2080 mg/kg	_
	LD50 Oral	Rat	4600 mg/kg	-
4-morpholinecarbaldehyde	LD50 Oral	Rat	6500 uL/kg	-
methyl methacrylate	LC50 Inhalation Vapor	Mouse	18500 mg/m ³	2 hours
	LC50 Inhalation Vapor	Rat	78000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Intraperitoneal	Guinea pig	1890 mg/kg	_
	LD50 Intraperitoneal	Mouse	945 mg/kg	_
	LD50 Intraperitoneal	Rat	1328 mg/kg	_
	LD50 Oral	Guinea pig	5954 mg/kg	-
	LD50 Oral	Mouse	3625 mg/kg	_
	LD50 Oral	Rabbit	8700 mg/kg	_
	LD50 Oral	Rat	7872 mg/kg	_
	LD50 Subcutaneous	Guinea pig	5954 mg/kg	_
	LD50 Subcutaneous	Mouse	5954 mg/kg	_
	LD50 Subcutaneous	Rat	7088 mg/kg	_
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
e, clentra della	LD50 Dermal	Rabbit	1 mL/kg	-
	LD50 Intraperitoneal	Guinea pig	930 mg/kg	_
	LD50 Intraperitoneal	Mouse	1230 mg/kg	-
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SECTION 11: Toxicological information

cological information			
LD50 Intraperitoneal	Mouse	1230 mg/kg	-
LD50 Intraperitoneal	Rabbit	1540 mg/kg	-
LD50 Intraperitoneal	Rabbit	1540 mg/kg	-
LD50 Intraperitoneal	Rat	1130 mg/kg	-
LD50 Intraperitoneal	Rat	1130 mg/kg	-
LD50 Oral	Mouse	1400 mg/kg	-
LD50 Oral	Rat	1800 mg/kg	-
LD50 Oral	Rat	1620 uL/kg	-
LD50 Subcutaneous	Rat	2170 mg/kg	-

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Reaction mass of	Eyes - Mild irritant	Rabbit	-	87 mg	-
ethylbenzene and xylene		Debbit		04 hours 5	
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
	Skin - Mild irritant	Rat	_	mg 8 hours 60 UI	_
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
		Rabbit		mg	
	Skin - Moderate irritant	Rabbit	-	100 %	-
4-methylpentan-2-one	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				UI	
	Eyes - Severe irritant	Rabbit	-	40 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
4-morpholinecarbaldehyde	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Chin Mild imitant	Debbit		mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
cyclohexanone	Eyes - Severe irritant	Rabbit	_	mg 24 hours 250	_
oyolonexanone		Rubbit		ug	
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Conclusion/Summary	: Not available.	Į	Į	!	<u> </u>
ooneidalon, odininary					

Sensitization		
Conclusion/Summary	:	Not available.
<u>Mutagenicity</u>		
Conclusion/Summary	:	Not available.
Carcinogenicity		
Conclusion/Summary	:	Not available.
Reproductive toxicity		
Conclusion/Summary	:	Not available.
<u>Teratogenicity</u>		
Conclusion/Summary	:	Not available.
Specific target organ toxicity		<u>single exposure)</u>



SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3	-	Narcotic effects
Reaction mass of ethylbenzene and xylene	Category 3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
4-methylpentan-2-one	Category 3	-	Narcotic effects
aromatic hydrocarbons, C9	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	Category 3	-	Narcotic effects
methyl methacrylate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Reaction mass of ethylbenzene and xylene Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	Category 2 Category 1	- inhalation	-

Aspiration hazard

Product/ingredient name	Result		
Reaction mass of ethylbenzene and xylene aromatic hydrocarbons, C9 Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclic, aromatics (2-25%)	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		

Information on the likely	:	Not available.
routes of exposure		
Potential acute health effects		

Eye contact	: Causes serious eye irritation.
Inhalation	: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Causes skin irritation.
Ingestion	: Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	No specific data.

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

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SECTION 11: Toxicological information

Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
<u>Long term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	<u>ects</u>
Not available.	
Conclusion/Summary	: Not available.
General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Other information

: Not available.

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.

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 100000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 185000 µg/l Marine water	Fish - Menidia beryllina	96 hours
	Acute LC50 62000 µg/l Fresh water	Fish - Danio rerio	96 hours
Reaction mass of	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene and xylene			
4-methylpentan-2-one	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 540000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 537000 µg/l Fresh water	Fish - Pimephales promelas -	96 hours
		Juvenile (Fledgling, Hatchling,	
		Weanling)	
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas -	33 days
		Embryo	
methyl methacrylate	Acute LC50 191000 µg/l Fresh water	Fish - Lepomis macrochirus -	96 hours
		Juvenile (Fledgling, Hatchling,	
		Weanling)	
	Acute LC50 159100 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 160200 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 150000 µg/l Fresh water	Fish - Pimephales promelas -	96 hours
		Adult	
	Acute LC50 130000 µg/l Fresh water	Fish - Pimephales promelas -	96 hours
		Adult	
cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas	72 hours
		reinhardtii - Exponential growth	
		phase	
	Acute LC50 630000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ate of issue/Date of revision	: 1-10-2022	Version : 1	
ate of previous issue	: No previous validation	15/20 A	kzoNobel

SECTION 12: Ecological information				
Acute LC50 527000 μg/l Fresh waterFish - Pimephales promelas96 hAcute LC50 732000 μg/l Fresh waterFish - Pimephales promelas96 h				
Conclusion/Summary	: Not available.			

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
Reaction mass of ethylbenzene and xylene	3.12	8.1 to 25.9	low
2-methoxy-1-methylethyl acetate	1.2	-	low
4-methylpentan-2-one	1.9	-	low
4-morpholinecarbaldehyde	-	<1.9	low
methyl methacrylate	1.38	-	low
cyclohexanone	0.86	-	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 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	: 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		
	EWC 08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances		
Da	te of issue/Date of revision	: 1-10-2022	Version :1	
Da	te of previous issue	: No previous validation	16/20	AkzoNobel

SECTION 13: Disposal considerations

· · · · ·	
<u>Packaging</u>	
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	IATA
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	111	111	111
14.5 Environmental hazards	No.	No.	No.
Additional inform	ation	4	1
ADR/RID	: <u>Viscous liqui</u>	i d exception This class 3 visco	us liquid is not subject to regulation

/RID : <u>Viscous liquid exception</u> This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. <u>Tunnel code</u> (D/E)

 IMDG
 : Emergency schedules
 F-E, _S-E_

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

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	: Not applicable.
according to IMO	
instruments	



SECTION 15: Regulatory information

	-		
		tion specific for the substance	or mixture
EU Regulation (EC) No. 19	• •	_	
	ances subject to authorizatio	<u>n</u>	
Annex XIV			
None of the components a			
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	: Not applicable.		
Other EU regulations			
VOC		e 2004/42/EC on VOC apply to th ical data sheet for further informa	
VOC for Ready-for-Use Mixture	: Not applicable.		
Industrial emissions (integrated pollution prevention and control) - Air	: Listed		
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed		
<u>Ozone depleting substan</u> Not listed.	<u>ces (1005/2009/EU)</u>		
Prior Informed Consent (I Not listed.	<u>PIC) (649/2012/EU)</u>		
Seveso Directive			
This product is controlled u	nder the Seveso Directive.		
Danger criteria			
Category			
P5c			
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.		
NACE	: Not available.		
UC62	: Not available.		
International regulations			
<u>Chemical Weapon Conven</u>	<u>tion List Schedules I, II & III C</u>	<u>hemicals</u>	
Not listed.			
<u>Montreal Protocol</u> Not listed.			
Stockholm Convention on	Persistent Organic Pollutant	S	
Not listed.		-	
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SECTION 15: Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Europe	: Not determined.
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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	 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
	SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative

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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated
	exposure.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]



SECTION 16: Other information			
Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Carc. 2 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Irrit. 2 Skin Sens. 1 STOT RE 1 STOT RE 2 STOT SE 3	ACUTE TOXICITY - Category 4 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3		
Date of printing Date of issue/ Date of	: 3 October 2022 : 1 October 2022		
revision			
Date of previous issue	: No previous validation		
Version	: 1		
Unique ID	:		

Notice to reader

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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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