

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: **CK271904224**
Product name: **KRAFT EPOXY AQUA PRIMER Grey Comp.-A**
UFI: **NX50-50VT-100M-G2G3**

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

Intended use: **Two-component epoxy aqua primer**

1.3. Details of the supplier of the safety data sheet

Name: **DRUCKFARBEN HELLAS SA**
Full address: **MEGARIDOS AVENUE**
District and Country: **19300 ASPROPYRGOS (ATTIKI) GREECE**
Tel.: **+30 210 5519500**
Fax: **+30 210 5519501**
e-mail address of the competent person responsible for the Safety Data Sheet: **psafety@druckfarben.gr**

1.4. Emergency telephone number

For urgent inquiries refer to: **0030-210-7793777**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Warning**

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

SECTION 2. Hazards identification ... / >>

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P280 Wear protective gloves / eye protection / face protection.
P501 Dispose of contents / container to an approved waste disposal plant or recycled in accordance with local / national / international regulations.
P102 Keep out of reach of children.
P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P337+P313 If eye irritation persists: Get medical advice / attention.

Contains: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
 1,2-Benzisothiazol-3(2H)-one (BW20)

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
Barium Sulfate Precipitated		
INDEX	$9 \leq x < 30$	
EC		
CAS	7727-43-7	
REACH Reg.	01-2119491274-35	
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)		
INDEX	603-074-00-8	$5 \leq x < 9$
EC	500-033-5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
CAS	25068-38-6	Skin Irrit. 2 H315: $\geq 5\%$, Eye Irrit. 2 H319: $\geq 5\%$
TITANIUM DIOXIDE		
INDEX		$5 \leq x < 9$
EC	236-675-5	
CAS	13463-67-7	
REACH Reg.	01-2119489379-17-0000	01-2119489379-17-0197
1-METHOXY-2-PROPANOL		
INDEX	603-064-00-3	$1 \leq x < 5$
EC	203-539-1	Flam. Liq. 3 H226, STOT SE 3 H336
CAS	107-98-2	
BENZYL ALCOHOL		
INDEX	603-057-00-5	$1 \leq x < 5$
EC	202-859-9	Acute Tox. 4 H302, Acute Tox. 4 H332
CAS	100-51-6	LD50 Oral: 1230 mg/kg, STA Inhalation vapours: 11 mg/l
2-(2-butoxyethoxy)ethanol		
INDEX	603-096-00-8	$0 \leq x < 0,5$
EC	203-961-6	Eye Irrit. 2 H319
CAS	112-34-5	
REACH Reg.	01-2119475104-44	
1,2-Benzisothiazol-3(2H)-one (BW20)		
INDEX	613-088-00-6	$0 \leq x < 0,05$
EC	220-120-9	Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
CAS	2634-33-5	Skin Sens. 1 H317: $\geq 0,05\%$
REACH Reg.	01-2120761540-60	LD50 Oral: 1150 mg/kg, STA Inhalation mists/powders: 0,051 mg/l

SECTION 3. Composition/information on ingredients ... / >>

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

INDEX 613-167-00-5 $0 \leq x < 0,0015$

EC 611-341-5

CAS 55965-84-9

REACH Reg. 01-2120764691-48

Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1C H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071
Skin Corr. 1C H314: $\geq 0,6\%$, Skin Irrit. 2 H315: $\geq 0,06\%$, Skin Sens. 1 H317: $\geq 0,0015\%$, Eye Dam. 1 H318: $\geq 0,6\%$, Eye Irrit. 2 H319: $\geq 0,06\%$
STA Oral: 100 mg/kg, STA Dermal: 50,001 mg/kg, STA Inhalation vapours: 0,501 mg/l

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

SECTION 6. Accidental release measures ... / >>

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία"»
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2022

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0,05				SKIN

SECTION 8. Exposure controls/personal protection ... / >>

2-(2-butoxyethoxy)ethanol

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	67,5	10	101,2	15	
AGW	DEU	67	10	100,5 (C)	15 (C)	Hinweis
MAK	DEU	67	10	100,5	15	Hinweis
TLV	GRC	67,5	10	101,2	15	
VLEP	ITA	67,5	10	101,2	15	
TLV	ROU	67,5	10	101,2	15	
WEL	GBR	67,5	10	101,2	15	
OEL	EU	67,5	10	101,2	15	
TLV-ACGIH		66	10			INHAL

Barium Sulfate Precipitated

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	10				
MAK	DEU	0,3				INHAL
MAK	DEU	0,3		1,6		RESP Hinweis
WEL	GBR	10				INHAL
WEL	GBR	4				RESP
TLV-ACGIH		5				INHAL

TITANIUM DIOXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	10				RESP
TLV	GRC		10			
TLV	ROU	10		15		
WEL	GBR	10				INHAL
WEL	GBR	4				RESP
TLV-ACGIH		2,5				RESP

BENZYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	5				
AGW	DEU	22	5	44	10	SKIN 11

1-METHOXY-2-PROPANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	375	100	568	150	SKIN
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
TLV	GRC	360	100	1080	300	
VLEP	ITA	375	100	568	150	SKIN
TLV	ROU	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

SECTION 8. Exposure controls/personal protection ... / >>

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	grey	
Odour	mild	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	9,5	Concentration: 100 % Temperature: 25 °C
Kinematic viscosity	830-1520 mm ² /s	Method:Converting Formula from Dynamic Viscosity & Density
Dynamic viscosity	95-105 KU	Temperature: 25 °C Method:ASTM D 562-05 Temperature: 25 °C
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,52-1,57 g/cm ³	Method:ISO 2811 Temperature: 25 °C
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics



Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F.Possibility of explosion.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials.Stable in normal conditions of use and storage.

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

2-(2-butoxyethoxy)ethanol

May react with: oxidising substances.May form peroxides with: oxygen.Develops hydrogen on contact with: aluminium.May form explosive mixtures with: air.

BENZYL ALCOHOL

May react dangerously with: hydrobromic acid,iron,oxidising agents,sulphuric acid.Risk of explosion on contact with: phosphorus trichloride.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents,strong acids.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

2-(2-butoxyethoxy)ethanol

Avoid exposure to: air.

BENZYL ALCOHOL

Avoid exposure to: air,sources of heat,naked flames.

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

10.5. Incompatible materials

2-(2-butoxyethoxy)ethanol

Incompatible with: oxidising substances,strong acids,alkaline metals.

BENZYL ALCOHOL

Incompatible with: sulphuric acid,oxidising substances,aluminium.

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances,strong acids,alkaline metals.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-(2-butoxyethoxy)ethanol

May develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

SECTION 11. Toxicological information ... / >>

2-(2-butoxyethoxy)ethanol

WORKERS: inhalation; contact with the skin.

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

2-(2-butoxyethoxy)ethanol

May be absorbed by inhalation, ingestion and skin contact; is irritating for the skin and especially for the eyes. May cause damage to the spleen. At room temperature the danger of inhalation is unlikely, due to the low vapour pressure of the substance.

1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

1,2-Benzisothiazol-3(2H)-one (BW20)

LD50 (Dermal):	> 2000 mg/kg Rat
LD50 (Oral):	1150 mg/kg Mouse

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LD50 (Dermal):	1000 mg/kg Rat
STA (Dermal):	50,001 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral):	550 mg/kg Rat
LC50 (Inhalation vapours):	0,31 mg/l Rat

2-(2-butoxyethoxy)ethanol

LD50 (Dermal):	2700 mg/kg Rabbit
LD50 (Oral):	3384 mg/kg Rat

Barium Sulfate Precipitated

LD50 (Oral):	> 3000 mg/kg Mouse
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TITANIUM DIOXIDE

LD50 (Oral):	> 10000 mg/kg Rat
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BENZYL ALCOHOL

LD50 (Dermal):	2000 mg/kg Rabbit
LD50 (Oral):	1230 mg/kg Rat
LC50 (Inhalation vapours):	> 4,1 mg/l/4h Rat
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

1-METHOXY-2-PROPANOL

LD50 (Dermal):	13000 mg/kg Rabbit
LD50 (Oral):	5300 mg/kg Rat
LC50 (Inhalation vapours):	54,6 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION



SECTION 11. Toxicological information ... / >>

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

1,2-Benzisothiazol-3(2H)-one (BW20)

LC50 - for Fish 0,8 mg/l/96h *Oncorhynchus mykiss* (Ιριδίζουσα πέστροφα)

EC50 - for Algae / Aquatic Plants 4,4 mg/l/72h *Daphnia magna* (Νερόψυλλος ο μέγας)

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LC50 - for Fish 0,58 mg/l/96h

EC50 - for Algae / Aquatic Plants 0,161 mg/l/72h

Chronic NOEC for Algae / Aquatic Plants 0,032 mg/l 96h

12.2. Persistence and degradability

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

NOT rapidly degradable 30 %, Exposure time: 28 d, OECD Test Guideline 301B

2-(2-butoxyethoxy)ethanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Barium Sulfate Precipitated

Solubility in water 0,1 - 100 mg/l

Degradability: information not available

TITANIUM DIOXIDE

Solubility in water < 0,001 mg/l

Degradability: information not available

SECTION 12. Ecological information ... / >>

BENZYL ALCOHOL
 Rapidly degradable

1-METHOXY-2-PROPANOL
 Solubility in water 1000 - 10000 mg/l
 Rapidly degradable

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Solubility in water 0,1 - 100 mg/l
 NOT rapidly degradable

12.3. Bioaccumulative potential

2-(2-butoxyethoxy)ethanol
 Partition coefficient: n-octanol/water 1

BENZYL ALCOHOL
 Partition coefficient: n-octanol/water 1,1

1-METHOXY-2-PROPANOL
 Partition coefficient: n-octanol/water < 1

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Partition coefficient: n-octanol/water > 2,918
 BCF 31

12.4. Mobility in soil

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Partition coefficient: soil/water 2,65

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

SECTION 14. Transport information ... / >>

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

SECTION 16. Other information ... / >>

- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

Code:
Product name

UFI :

Intended use

Name
Full address
District and Country

e-mail address of the competent person
responsible for the Safety Data Sheet

For urgent inquiries refer to

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements: Causes severe skin burns and eye damage.

... / >>

May cause an allergic skin reaction.
 Very toxic to aquatic life with long lasting effects.
 Corrosive to the respiratory tract.

Precautionary statements:

Do not breathe dust / fume / gas / mist / vapours / spray.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 Wear protective gloves/ protective clothing / eye protection / face protection.
 Immediately call a POISON CENTER or a doctor
 Wash hands thoroughly after handling.
 Keep out of reach of children.
 Dispose of contents / container to an approved waste disposal plant or recycled in accordance with local / national / international regulations.

2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine
 Polyamideamine
 M-PHENYLENEBIS (METHYLAMINE)

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

Contains:

Identification

INDEX 030-011-00-6 9 \leq x < 25
 EC 231-944-3
 CAS 7779-90-0
 REACH Reg. 01-2119485044-40-0000 01-2119485044-40-0001

INDEX 9 \leq x < 25
 EC
 CAS

INDEX 5 \leq x < 9
 EC
 CAS

INDEX 3 \leq x < 5
 EC 292-053-3
 CAS 90530-15-7
 REACH Reg. 01-21200947-47

INDEX 1 \leq x < 3
 EC 216-032-5
 CAS 1477-55-0
 REACH Reg. 01-2119480150-50

INDEX 030-013-00-7 0,25 \leq x < 0,5
 EC 215-222-5
 CAS 1314-13-2
 REACH Reg. 01-2119463881-32-0073 01-2119463881-32

... / >>

INDEX 007-010-00-4 $0 \leq x < 0,5$

EC 231-555-9
CAS 7632-00-0
REACH Reg. 01-2119471836-27

The full wording of hazard (H) phrases is given in section 16 of the sheet.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

Specific information on symptoms and effects caused by the product are unknown.

Information not available

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

... / >>

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

Any information on personal protection and disposal is given in sections 8 and 13.

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Information not available

Regulatory references:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"»
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
	TLV-ACGIH	ACGIH 2023

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	5		10		като цинк
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP
TLV	GRC	5		10		
TLV	ROU	5		10		Fumuri
TLV-ACGIH		2		10		RESP

... / >>

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH				0,018 (C)		SKIN

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

RESPIRATORY PROTECTION

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Appearance	liquid	Temperature: 25 °C
Colour	transparent	Temperature: 25 °C
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	10,0-11,0	Concentration: 100 % Temperature: 25 °C
Kinematic viscosity	1100-2590 mm ² /s	Method:Converting Formula from Dynamic Viscosity & Density Temperature: 25 °C
Dynamic viscosity	95-120 KU	Method:ASTM D 562-05 Temperature: 25 °C
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,12-1,18 g/cm ³	Method:ISO 2811 Temperature: 25 °C
Relative vapour density		

... / >>

ATE (Oral) of the mixture: >2000 mg/kg
ATE (Dermal) of the mixture: Not classified (no significant component)

Corrosive to the respiratory tract.

Polyamideamine
LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): > 2000 mg/kg Rat
LC50 (Inhalation vapours): > 5 mg/l Rat

Aliphatic polyamine
LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): > 5000 mg/kg Rat

Tri-Zinc Bis(Orthophosphate)
LD50 (Oral): > 5000 mg/kg Rat - Wistar
LC50 (Inhalation mists/powders): > 5,7 mg/l Rat

Sodium Nitrite
LD50 (Oral): 180 mg/kg Rat

M-PHENYLENEBIS (METHYLAMINE)
LD50 (Dermal): 3100 mg/kg Rat
LD50 (Oral): > 200 mg/kg Rat - Sprague-Dawley
STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)
LC50 (Inhalation mists/powders): 1,34 mg/l

SKIN CORROSION / IRRITATION

Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment.

Aliphatic polyamine LC50 - for Fish	0,83 mg/l/96h Calculated
2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	> 100 mg/l/48h Daphnia 9,92 mg/l/72h Pseudokirchneriella subcapitata
Tri-Zinc Bis(Orthophosphate) LC50 - for Fish EC50 - for Crustacea	0,78 mg/l/96h Pimephales promelas 0,86 mg/l/48h Daphnia magna
Zinc Oxide LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish Chronic NOEC for Algae / Aquatic Plants	1,1 mg/l/96h Oncorhynchus mykiss 1,7 mg/l/48h Daphnia magna 0,14 mg/l/72h Pseudokirchnerella subcapitata 0,53 mg/l 0,024 mg/l
Sodium Nitrite LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	0,79 mg/l/96h Oncorhynchus mykiss 23,31 mg/l/48h Penaeus monodon 159 mg/l/72h Tetraseimis chui
M-PHENYLENEBIS (METHYLAMINE) LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	87,6 mg/l/96h Oryzias latipes 15,2 mg/l/48h Daphnia magna 20,3 mg/l/72h Pseudokirchnerella subcapitata
Tri-Zinc Bis(Orthophosphate) Solubility in water Degradability: information not available	2,7 mg/l
Zinc Oxide Solubility in water NOT rapidly degradable	2,9 mg/l
Sodium Nitrite Solubility in water Degradability: information not available	848000 mg/l
M-PHENYLENEBIS (METHYLAMINE) Solubility in water Rapidly degradable	1000 - 10000 mg/l
Zinc Oxide BCF	> 175
Sodium Nitrite Partition coefficient: n-octanol/water	-3,7
M-PHENYLENEBIS (METHYLAMINE) Partition coefficient: n-octanol/water	0,18

... / >>

Information not available

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

Information not available

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

ADR / RID, IMDG, IATA: UN 3267

ADR / RID: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine; M-PHENYLENEBIS (METHYLAMINE))
 IMDG: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine; M-PHENYLENEBIS (METHYLAMINE) ; Tri-Zinc Bis(Orthophosphate))
 IATA: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (2-Propenenitrile, reaction products with 3-amino-1,5,5-trimethylcyclohexanemethanamine; M-PHENYLENEBIS (METHYLAMINE))

ADR / RID: Class: 8 Label: 8



IMDG: Class: 8 Label: 8



IATA: Class: 8 Label: 8



ADR / RID, IMDG, IATA: II

... / >>

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

ADR / RID:	HIN - Kemler: 80 Special provision: 274	Limited Quantities: 1 L	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-B	Limited Quantities: 1 L	
IATA:	Cargo: Passengers: Special provision:	Maximum quantity: 30 L Maximum quantity: 1 L A3, A803	Packaging instructions: 855 Packaging instructions: 851

Information not relevant

Seveso Category - Directive 2012/18/EU: E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

<u>Product</u>	
Point	3
<u>Contained substance</u>	
Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
 not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Oxidising solid, category 3
Acute toxicity, category 3
Acute toxicity, category 4
Skin corrosion, category 1B
Serious eye damage, category 1
Eye irritation, category 2
Skin sensitization, category 1A
Skin sensitization, category 1B
Hazardous to the aquatic environment, acute toxicity, category 1
Hazardous to the aquatic environment, chronic toxicity, category 1
Hazardous to the aquatic environment, chronic toxicity, category 2
Hazardous to the aquatic environment, chronic toxicity, category 3
May intensify fire; oxidiser.
Toxic if swallowed.
Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Causes serious eye irritation.
May cause an allergic skin reaction.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects.
Corrosive to the respiratory tract.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament

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8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
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- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
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- IFA GESTIS website
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Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 07 / 08 / 09 / 11 / 12 / 14 / 15 / 16.