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

1.1 Product identifier

Commercial product name:	HinriPoly hardener -
Utilization of the substance of the formulation:	Hardener for Polyole

1.2 Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:	ERNST HINRICHS Dental GmbH
Street / mailbox:	Borsigstr. 1
Country code. / postal code / city:	D - 38644 Goslar
Phone:	0 53 21 / 5 06 24
Fax:	0 53 21 / 5 08 81
E-mail / Website:	info@hinrichs-dental.de / www.hinrichs-dental.de
Further information obtainable from:	ERNST HINRICHS Dental GmbH

1.4 Emergency telephone number

ERNST HINRICHS Dental GmbH	+49 (0) 53 21 / 5 06 24 (Mon-Fri. 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification *

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS08 health hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2	H351	Suspected of causing cancer
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS09 environment

Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.

GHS07

Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H335	May cause respiratory irritation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

Hazard pictograms:

GHS07 GHS08 GHS09

Signal word Danger

Hazard-determining components of labelling: 4,4'-diphenyl-methane diisocyanate. oligomeric

Hazard statements:

H332	Harmful if inhaled.
H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P305+P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information: EUH204 Contains isocyanates. May produce an allergic reaction.
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards: The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 25686-28-6 NLP: 500-040-3	4,4'-diphenyl-methane diisocyanate.oligomeric  Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373	50 - 75%

	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	
CAS: 38640-62-9 EINECS: 254-052-6	alkylated aromatic hydrocarbon Asp. Tox. 1, H304 Aquatic Chronic 1, H410	25 - 50%
CAS: 126-73-8 EINECS: 204-800-2	tributyl phosphate Carc. 2, H351; Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	0.25-1%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information: Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest, provide artificial respiration. Involve doctor immediately.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Clean with water and soap. If possible, also wash with polyethylene glycol 400. Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

After eye contact: Protect unharmed eye.
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.
If swallowed, rinse mouth with water (only if the person is conscious).
A person vomiting while laying on their back should be turned onto their side. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed: The product is irritating to the respiratory tract and may trigger skin and Respiratory sensitization. Treatment of acute irritation or bronchial is primarily symptomatic.
Depending on the degree of exposure and the
Complaints may be necessary long-term medical care.

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Carbon dioxide (CO2), foam, dry powder, for larger fires, water spray.

	For safety reasons unsuitable extinguishing agents:	Water Water with full jet
5.2	**Special hazards arising from the substance or mixture:**	In case of fire, formation of carbon monoxide, nitrogen oxide, isocyanate vapour, and traces of hydrogen cyanide is possible. Fireman have to wear self-contained breathing apparatus. Do not let enter contaminated extinguishing water into the soil, groundwater or surface waters.
5.3	**Advice for firefighters** **Protective equipment:**	Do not inhale explosion gases or combustion gases. Wear self-contained respiratory protective device. Wear fully protective suit.
	Additional information	Cool endangered receptacles with water spray. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1	**Personal precautions, protective equipment and emergency procedures:**	Wear protective clothing.
6.2	**Environmental precautions:**	Do not allow to enter sewers/ surface or ground water.
6.3	**Methods and material for containment and cleaning up:**	Remove mechanically, with residual wet, absorbent material (e.g. sawdust, chemical binder based on Calcium silicate hydrate, sand). After approx. 1 hour transfer to waste container and do not seal (evolution of CO2). Keep damp in a safe ventilated area for several Leave days. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
6.4	**Reference to other sections:**	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1	**Precautions for safe handling**	At workplaces or system parts where isocyanate aerosols and / or vapours in higher concentrations can arise (e.g. pressure relief, mould ventilation, Blowing through mixing heads with compressed air), the occupational hygiene limit values are prevented. The air movement must be carried out by the people be done away. The effectiveness of the systems must be checked at regular intervals. Air limit values mentioned in Chapter 8 must be monitored. The personal protective measures described in Chapter 8 must be observed. Contact with the skin and eyes as well as the inhalation of the vapours absolutely avoid. Keep away from food and luxury items. Hands before breaks and at the end of work wash and apply protective skin ointment. Store work clothes separately. Soiled, Take off soaked clothing immediately. The protective measures necessary when

dealing with isocyanates must be observed. Avoid contact with skin and eyes and inhalation of vapours.
Thorough dedusting. Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.

Information about fire - and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: Keep container tightly closed and dry and storage in a good ventilated room. Storage temperature: 20 - 25 °C.

Information about storage in one common storage facility: Store away from water.
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
Store away from foodstuffs.

Further information about storage conditions: Protect from humidity and water.
Protect from frost.
Keep container tightly sealed.

Storage class: 10

7.3 Denomination of Origin: Made in Germany

Processing information: Homogenize content before use

General remark: For processing instructions see data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:		
126-73-8 tributyl phosphate		
OEL (Ireland) WEL (Great Britain)	Long-term value: 5 mg/m³ Short-term value: 5 mg/m³ Long-term value: 5 mg/m³	
DNELs		
25686-28-6 4,4'-diphenyl-methane diisocyanate. oligomeric		
Inhalative	DNEL Acute - local effects DNEL Long-term - local effects	0.05 mg/m³ (General population) 0.1 mg/m³ (workers) 0.025 mg/m³ (General population) 0.05 mg/m³ (workers)
38640-62-9 alkylated aromatic hydrocarbon		
Oral Dermal Inhalative	DNEL Long-term DNEL Long-term DNEL Long-term	2.1 mg/kg bw/day (General population) 2.1 mg/kg bw/day (General population) 4.3 mg/kg bw/day (workers) 7.4 mg/m³ (General population) 30 mg/m³ (workers)
126-73-8 tributyl phosphate		

Oral	DNEL systemic effects - long term exposure	0.22 mg/kg bw/d (General population)
	DNEL Short term - systemic effects	0.88 mg/kg bw/d (General population)
Dermal	DNEL Acute - systemic effects	0.88 mg/kg bw/day (General population) 1.78 mg/kg bw/day (workers)
	DNEL Long-term - systemic effects	0.22 mg/kg bw/day (General population) 0.44 mg/kg bw/day (workers)
	DNEL Short term - local effects	0.88 mg/kg bw/d (General population) 1.78 mg/kg bw/d (workers)
	DNEL Long-term exposure - local effects	0.22 mg/kg bw/d (General population) 0.44 mg/kg bw/d (workers)
Inhalative	DNEL Long-term exposure - systemic effects	0.77 mg/m³ (General population) 3.13 mg/m³ (workers)
	DNEL Long-term exposure - local effects	0.77 mg/m³ (General population) 3.13 mg/m³ (workers)
	DNEL Acute - local effects	3.08 mg/m³ (General population) 12.52 mg/m³ (workers)
	DNEL Short-term exposure - systemic effects	3.08 mg/m³ (General population) 12.52 mg/m³ (workers)
PNECs		
25686-28-6 4,4'-diphenyl-methane diisocyanate. oligomeric		
	PNEC STP	1 mg/L (sewage plant)
	PNEC soil	1 mg/kg (soil (Boden))
	PNEC	1 mg/l (freshwater) 0.1 mg/l (marine water) 10 mg/l (intermittent releases)
38640-62-9 alkylated aromatic hydrocarbon		
Oral	PNEC	25 mg/kg (food)
	PNEC STP	0.15 mg/L (sewage plant)
	PNEC aqua	0.236 ug/L (freshwater) 0.0236 ug/L (marine water)
	PNEC sediment	0.853 mg/kg (freshwater) 0.085 mg/kg (marine water)
	PNEC soil	0.19 mg/kg (soil (Boden))
126-73-8 tributyl phosphate		
	PNEC STP	1 mg/L (sewage plant)
	PNEC	0.082 mg/l (freshwater)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls Personal protective equipment:

Appropriate engineering controls: No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection:

Full-contained breathing apparatus with a gas mask. The respirators used for protection can be used with Type A filter against organic vapours, where powder or aerosol is present at least with the A / P2 filter. In case of hypersensitivity of the respiratory tract and skin (asthma, chronic bronchitis, chronic skin disease) is inadvisable to work with the product. Symptoms in the respiratory tract can also occur several hours after overexposure.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Not necessary if room is well-ventilated.

Hand protection:

Preventive skin protection (3-point program) required

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

Suitable materials for protective gloves, EN 374-3:
Polychloroprene - CR: thickness> = 0.5 mm, breakthrough time> = 480 min.
NBR - NBR: thickness> = 0,35 mm, Breakthrough time> = 480 min.
Butyl rubber - IIR: thickness> = 0.5 mm, breakthrough time> = 480 min.
Fluorine rubber - FKM: thickness> = 0.4 mm; breakthrough time> = 480 min.
Recommendation: Dispose of contaminated gloves.
The exact break trough time has to be found out by the manufacturer of the protective gloves and
has to be observed.

Eye protection:

Tightly sealed goggles

Body protection:

Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	41 °C
Boiling point or initial boiling point and boiling range:	>200 °C
Flammability	Not determined.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	>150 °C
Auto-ignition temperature:	400 °C
Decomposition temperature:	Not determined.
pH:	Not applicable.
Viscosity:	
Kinematic viscosity:	Not applicable.
Dynamic at 20 °C:	100 mPas
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure at 25 °C:	0 hPa
Density and/or relative density	
Density at 20 °C:	1.2 g/cm³
Relative density:	Not determined.
Vapour density.	Not applicable.

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content	
VOC (EC):	8.5 g/l
Change in condition:	
Evaporation rate:	Not applicable.
Information with regard to physical hazard classes:	
Explosives:	Void
Flammable gases:	Void
Aerosols:	Void
Oxidising gases:	Void
Gases under pressure:	Void
Flammable liquids:	Void
Flammable solids:	Void
Self-reactive substances and mixtures:	Void
Pyrophoric liquids:	Void
Pyrophoric solids:	Void
Self-heating substances and mixtures:	Void
Substances and mixtures, which emit flammable gases in contact with water:	Void
Oxidising liquids:	Void
Oxidising solids:	Void

Organic peroxides:	Void
Corrosive to metals:	Void
Desensitised explosives:	Void

SECTION 10: Stability and reactivity

10.1 Reactivity

Diisocyanates react with many materials where the reaction rate with the temperature and with increasing contact increases and the reactions can be severe.
Contact is increased by stirring or by mixing of another substance with Diisocyanate. Diisocyanates are not soluble in water, sink to the bottom but react slowly at the Interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. In the reaction with water to form carbon dioxide and heat.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

Exothermic reaction with amines and alcohols; reacts with water forming C02, in closed containers risk of bursting owing to increase of pressure.

10.4 Conditions to avoid:

Heat, flames and sparks.
Moisture. Heat, open flames and other ignition sources. With contaminated pipes and tanks or corroded or rusty containers may lead to increased formation of hydrogen.
Detail in section

10.5 Incompatible materials:

water , alcohol , amine , base and acid
Incompatible with oxidizing agents, acids.

10.6 Hazardous decomposition products:

At the air > 300 °C: acrolein

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if inhaled.

LD/LC50 values relevant for classification:		
25686-28-6 4,4'-diphenyl-methane diisocyanate. oligomeric		
Oral	LD50	>2,000 mg/kg (rat) (OECD 425Acute Oral Toxicity: Up-and-Down Procedure)
Dermal	LD50	>9,400 mg/kg (rat) (OECD 402 Acute Dermal Toxicity)
Inhalative	LC 50 / 1h	0.368 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)
	LC 50 / 1h	>2.24 mg/l (rat)
38640-62-9 alkylated aromatic hydrocarbon		
Oral	LD50	>4,000 mg/kg (rat) (OECD 401 Acute Oral Toxicity)
	NOAEL	~170 mg/kg (rat)
Dermal	LD50	>4,000 mg/kg (rat) (OECD 402 Acute Dermal Toxicity)
Inhalative	LC50/4 h	>5.6 mg/l (rat) (OECD 403 Acute Inhalation Toxicity)
126-73-8 tributyl phosphate		
Oral	LD50	1,552 mg/kg (rat)

Skin corrosion/irritation:

Causes skin irritation.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Suspected of causing cancer.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties None of the ingredients is listed.

SECTION 12: Ecological information *

12.1 Toxicity

Aquatic toxicity:	
25686-28-6 4,4'-diphenyl-methane diisocyanate. oligomeric	
LC50 (96 h)	>1,000 mg/l (Danio Rerio)
EC50 (72 h)	>1,640 mg/l (Desmodesmus subspicatus)
EC50 (24h)	>1,000 mg/l (Daphnia Magna)
EC50(3h)	>100 mg/l (sludge)
NOEC / 21d	>10 mg/l (Daphnia Magna)
LC50 (14d)	>1,000 mg/kg (Eisenia fetida (Regenwurm)) (OECD 207 Earthworm, Acute Toxicity Tests)
EC50 (14d)	>1,000 mg/kg (Avena sativa (Hafer)) (OECD 208 Terrestrial Plant Test) >1,000 mg/kg (Lactuca Sativa (Kopfsalat)) (OECD 208 Terrestrial Plant Test)
38640-62-9 alkylated aromatic hydrocarbon	
LC0(96h)	0.5 mg/l (fish)
EC0 (48h)	0.16 mg/l (D)
LL50 (48h)	1.7 mg/L (D)
EC0 (72h)	0.15 mg/l (A)
NOEC / 21d	0.013 mg/l (D) (OECD 202 Daphnia sp. Acute Immobilisation Test)
126-73-8 tributyl phosphate	
NOEC / 21d	1.3 mg/l (Daphnia Magna)

12.2 Persistence and degradability: No further relevant information available.

Other information: Elimination by adsorption onto activated sludge

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available

12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties: The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects
Remark: Toxic for fish

Additional ecological information:
General notes:
Toxic for aquatic organisms
Also poisonous for fish and plankton in water bodies.
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
WGK 3 stark wassergefährdend

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation:
Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate waste code according to the European Waste Catalogue (EWC) should be used.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue: 08 05 01* waste isocyanates

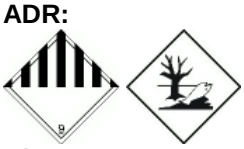
Uncleaned packaging:
Recommendation:
The empty containers may not be disposed of unless the adhesive to the container walls have been removed.
Disposal according to official regulations.
Disposal must be made according to official regulations.

SECTION 14: Transport information *

14.1 UN-Number
ADR, IMDG, IATA: UN3082

14.2 UN proper shipping name
ADR: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon)
IMDG, IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon), MARINE POLLUTANT

14.3 Transport hazard class(es)
ADR:



Class: 9 (M6) Miscellaneous dangerous substances and articles.
Label: 9

IMDG, IATA:

	Class:	9 Miscellaneous dangerous substances and articles.
	Label:	9
14.4	**Packing group**	
	ADR, IMDG, IATA	III
14.5	**Environmental hazards:**	
	Special marking (ADR):	Symbol (fish and tree)
	Special marking (IATA):	Symbol (fish and tree)
14.6	**Special precautions for user**	Warning: Miscellaneous dangerous substances and articles.
	Hazard identification number (Kemler code):	90
	EMS Number:	F-A,S-F
	Stowage Category:	A
14.7	**Maritime transport in bulk according to**	
	IMO instruments:	Not applicable
	Transport/Additional information:	
	ADR	
	Limited quantities (LQ)	5L
	Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
	Transport category	3
	Tunnel restriction code	(-)
	IMDG	
	Limited quantities (LQ)	5L
	Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
	UN "Model Regulation":	UN3082 , ENVIRONMENTAL LY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (alkylated aromatic hydrocarbon), 9, III

SECTION 15: Regulatory information *

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

Labelling according to Regulation (EC) No 1272/2008:	The product is classified and labelled according to the CLP regulation.

Hazard pictograms:

GHS07 GHS08 GHS09

Signal word:	Danger.

Hazard-determining components of labelling: 4,4'-diphenyl-methane diisocyanate, oligomeric

Hazard statements:

H332	Harmful if inhaled
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P305+P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU
Named dangerous substances - ANNEX I: None of the ingredients is listed.

Seveso category: E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II: None of the ingredients is listed.

REGULATION (EU) 2019/1148:
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS: None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors: None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: None of the ingredients is listed.

National regulations:
Technical instructions (air):

Class	Share in %
NK	0.25-1

Waterhazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

16.1 This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation.
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects.
EUH204	Contains isocyanates. May produce an allergic reaction.

Abbreviations and acronyms:
Recommended restriction of use: The information in this safety data sheet corresponds to the best of our knowledge at the time of the revision. The information should give you clues for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product mentioned in this safety data sheet is mixed with other materials, mixed or processed, or subjected to processing, the information in this safety data sheet, unless expressly stated otherwise, cannot be transferred to the new material produced in this way.

UFI code is valid in: Germany, Belgium, Spain, Denmark, Romania, France, Austria, Netherlands, Hungary, Poland, Portugal, Slovenia, Czech Republic, Italy, Sweden, Ireland, Greece, Lithuania, Latvia

Date of previous version: 31.03.2023

Version number of previous version: 77

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO:	International Civil Aviation Organisation
ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
VOC:	Volatile Organic Compounds (USA, EU)
DNEL:	Derived No-Effect Level (REACH)
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
PBT:	Persistent, Bioaccumulative and Toxic
vPvB:	very Persistent and very Bioaccumulative
Acute Tox. 4:	Acute toxicity, Hazard Category 4
Skin Irrit. 2:	2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2:	Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1:	Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1:	Sensitisation - Skin, Hazard Category 1
Carc. 2:	Carcinogenicity, Hazard Category 2
STOT SE 3:	Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2:	Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1:	Aspiration hazard, Hazard Category 1
Aquatic Chronic 1:	Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 3:	Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

*** Data compared to the previous version altered.**