Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.03.2023 Version number 2 (replaces version 1) Revision: 13.03.2023

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

· 1.1 Product identifier

· Trade name: **Recoat Silk**

· Article number: 84251
· 1.2 Relevant identified uses of the substance or mixture and uses advised against
· Sector of Use
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· Application of the substance / the mixture Coating compound/ Surface coating/ paint
· Uses advised against SU21 Consumer uses: Private households / general public / consumers

· 1.3 Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
Dercom B.V.
Platinawerf 24A
6641 TL Beuningen - Holland
Tel: 0031 24 67 525 74
Fax: 0031 24 67 525 77

· Further information obtainable from: a.derks@dercom.nl
· 1.4 Emergency telephone number:
0031 6 100 145 27
Intended only to inform doctors in case of accidental poisoning.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008


GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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

· Signal word Warning

· Hazard-determining components of labelling:
2-octyl-2H-isothiazol-3-one
1,2-benzisothiazol-3(2H)-one
· Hazard statements
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
· Precautionary statements
P280 Wear protective gloves / eye protection.
P280 Wear protective clothing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· Additional information:
Restricted to professional users.
· 2.3 Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

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Trade name: **Recoat Silk**

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components %(m/m):

CAS: 52-51-7 EINECS: 200-143-0 Reg.nr.: 01-2119980938-15	bronopol (INN) Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; STOT SE 3, H335	≥0.0025-<0.025%
CAS: 2634-33-5 EINECS: 220-120-9 Reg.nr.: 01-2120761540-60	1,2-benzisothiazol-3(2H)-one Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1; H317: C ≥ 0.05 %	<0.05%
CAS: 26530-20-1 EINECS: 247-761-7	2-octyl-2H-isothiazol-3-one Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1A, H317, EUH071 ATE: LD50 oral: 125 mg/kg LC50/4h inhalative: 0.27 mg/m3 LD50 dermal: 311 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.0025-<0.025%
CAS: 55965-84-9 Reg.nr.: 01-2120764691-48	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) Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1, H317 Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.00025-<0.0015%

· Additional information: For the wording of the listed hazard 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.
· 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:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove contactlenses.
· After swallowing:
Rinse mouth.
Do not induce vomiting; call for medical help immediately.
· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
· 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:
Use fire extinguishing methods suitable to surrounding conditions.
CO2 or powder. Fight larger fights with alcohol resistant foam.
· 5.2 Special hazards arising from the substance or mixture Carbon monoxide (CO)

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· 5.3 Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Not required.
· 6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Collect leaking fluid in lockable waste containers.
· 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 No special precautions are necessary if used correctly.
· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities
· Storage:
· Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
· Information about storage in one common storage facility:
Store away from oxidising agents.
Store away from strong alkalis.
· Further information about storage conditions: Protect from frost.
· Storage class: 10
· 7.3 Specific end use(s) No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters
· Ingredients with limit values that require monitoring at the workplace:

2634-33-5 1,2-benzisothiazol-3(2H)-one

Dermal	Long-term exposure - systemic effects	0.966 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	6.81 mg/m3 (worker)

55965-84-9 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)

Inhalative	Acute - short-term exposure - local effects	0.04 mg/m3 (worker)
	Long-term exposure - local effects	0.02 mg/m3 (worker)

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2634-33-5 1,2-benzisothiazol-3(2H)-one
PNEC 3 mg/kg (soil)
PNEC 0.403 µg/L (aqua, marine water)
4.03 µg/L (aqua freshwater)
PNEC 4.99 µg/kg (sediment marine water)
49.9 µg/kg (sediment freshwater)
PNEC 1.03 mg/l (STP)

55965-84-9 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)
PNEC 0.027 mg/kg (sediment marine water)
0.027 mg/kg (sediment freshwater)
PNEC 3.39 µg/L (aqua, marine water)
3.39 µg/L (aqua freshwater)
PNEC 0.23 mg/l (STP)

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

· 8.2 Exposure controls
· Appropriate engineering controls Ensure adequate ventilation.
· Individual protection measures, such as personal protective equipment
· General protective and hygienic measures:
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
· Respiratory protection:
Not necessary if room is well-ventilated.
Short term filter device:
Filter A.
If workers are exposed to concentrations above the exposure limit, they should use a suitable, certified respirator.
· Hand protection

Protective gloves

The glove material has to be impermeable and resistant to the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· Material of gloves
Suitable materials for safety gloves (EN 374):
Butyl rubber, BR
· Penetration time of glove material
Thickness of the gloves ≥ 0.5 mm
Value for the permeation: Level ≥ 480 min
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· Eye/face protection Goggles recommended during refilling
· Body protection: Solvent resistant protective clothing
· Environmental exposure controls No further data; see item 6 and 13.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
· General Information

· Physical state	Fluid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	≥100 °C (7732-18-5 water, distilled, conductivity or of similar purity)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.

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· Upper:	Not determined.
· Flash point:	>100 °C
· Decomposition temperature:	Not determined.
· pH at 20 °C	8
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	500-600 mPas
· Solubility	
· water:	Slightly soluble.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	≤23 hPa (7732-18-5 water, distilled, conductivity or of similar purity)
· Density and/or relative density	
· Density at 20 °C:	1.07 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	1.3 %
· Water:	61.7 %
· VOC (EC)	1.3 %
· Solids content:	37.0 %
· Change in condition	
· Evaporation rate	Not determined.
· 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 No further relevant information available.
· 10.2 Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· 10.3 Possibility of hazardous reactions Reacts with strong oxidizing agents.
· 10.4 Conditions to avoid High temperatures.
· 10.5 Incompatible materials: Oxidizing agents

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· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
· Acute toxicity Based on available data, the classification criteria are not met.
· LD/LC50 values relevant for classification:

52-51-7 bronopol (INN)
Oral LD50 305 mg/kg (rat)

26530-20-1 2-octyl-2H-isothiazol-3-one
Oral LD50 125 mg/kg (ATE)
Dermal LD50 311 mg/kg (ATE)
Inhalative LC50/4h 0.27 mg/m3 (ATE)

55965-84-9 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)
Oral LD50 1,096 mg/kg (rat)

· Skin corrosion/irritation
May cause an allergic skin reaction.
Based on available data, the classification criteria are not met.
· Serious eye damage/irritation Based on available data, the classification criteria are not met.
· Respiratory or skin sensitisation May cause an allergic skin reaction.
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure Based on available data, the classification criteria are not met.
· STOT-repeated exposure Based on available data, the classification criteria are not met.
· 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:

55965-84-9 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)
EC50/48h 0.16 mg/l (daphnia magna)
EC50/72h 0.018 mg/l (algae)
LC50/96h 0.28 mg/l (lepomis macrochirus)
0.19 mg/l (fish)

· 12.2 Persistence and degradability No further relevant information available.
· Degree of elimination:

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· 12.3 Bioaccumulative potential

· 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: Harmful to fish
· Additional ecological information:
· General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
· Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
· European waste catalogue
08 01 15* aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances
16 10 01* aqueous liquid wastes containing hazardous substances

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.
· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number
· ADR/ADN, ADN, IMDG, IATA Void
· 14.2 UN proper shipping name
· ADR/ADN, ADN, IMDG, IATA Void
· 14.3 Transport hazard class(es)

· ADR/ADN, ADN, IMDG, IATA
· Class Void
· 14.4 Packing group
· ADR/ADN, IMDG, IATA Void
· 14.5 Environmental hazards: Not applicable.
· 14.6 Special precautions for user Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments Not applicable.
· UN "Model Regulation": Void

SECTION 15: Regulatory information

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

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

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· 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:

· Other regulations, limitations and prohibitive regulations
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.

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

*
SECTION 16: Other information
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
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
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.
EUH071 Corrosive to the respiratory tract.

· Classification according to Regulation (EC) No 1272/2008

Skin sensitisation Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Department issuing SDS: Product safety department.
· Contact: Mrs. A. Derks
· Date of previous version: 12.05.2022
· Version number of previous version: 1
· Abbreviations and acronyms:
ADR: Accord relatif au transport international 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)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1: Skin corrosion/irritation – Category 1
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.

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

· 1.1 Product identifier

· Trade name: **Recoat Silk Hardener**

· Article number: 45691
· 1.2 Relevant identified uses of the substance or mixture and uses advised against
· Sector of Use
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· Application of the substance / the mixture Hardening agent/ Curing agent

· 1.3 Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
Dercom B.V.
Platinawerf 24A
6641 TL Beuningen - Holland
Tel: 0031 24 67 525 74
Fax: 0031 24 67 525 77

· Further information obtainable from: a.derks@dercom.nl
· 1.4 Emergency telephone number:
0031 6 100 145 27
Intended only to inform doctors in case of accidental poisoning.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture
· Classification according to Regulation (EC) No 1272/2008

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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.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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

· Signal word Warning

· Hazard-determining components of labelling:
Hydophilic aliphatic polyisocyanate bases on HDI
propane-1,2-diyl diacetate
· Hazard statements
H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
· Precautionary statements
P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.

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· Additional information:
EUH204 Contains isocyanates. May produce an allergic reaction.
Restricted to professional users.
· 2.3 Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components %(m/m):

CAS: 666723-27-9	Hydophilic aliphatic polyisocyanate bases on HDI Consisting of: 28182-81-2 Hexamethylene diisocyanate, oligomers (53%); 822-06-0 hexamethylene-di-isocyanate (0.23%); 98-94-2 cyclohexyldimethylamine (1.6%) Acute Tox. 4, H332; Skin Sens. 1B, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	50-75%
CAS: 623-84-7 EINECS: 210-817-6	propane-1,2-diyl diacetate Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	25-50%

· Additional information: For the wording of the listed hazard 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.
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:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Remove contactlenses.
· After swallowing: Do not induce vomiting; call for medical help immediately.
· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
· 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: CO_2 or powder. Fight larger fights with alcohol resistant foam.
· 5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.
Carbon monoxide (CO)
· 5.3 Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
· 6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Collect leaking fluid in lockable waste containers.
· 6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.
Examination of lung function should be carried out on a regular basis on persons spraying this preparation.
· Information about fire - and explosion protection: Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities
· Storage:
· Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
· Information about storage in one common storage facility: Store away from oxidising agents.
· Further information about storage conditions: Keep container tightly sealed.
· Storage class: 10
· 7.3 Specific end use(s) No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters
· Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· Additional information:
The lists valid during the making were used as basis.
Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.
Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

· 8.2 Exposure controls
· Appropriate engineering controls Ensure adequate ventilation.
· 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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· Respiratory protection:
Short term filter device:
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.
Filter A.
If workers are exposed to concentrations above the exposure limit, they should use a suitable, certified respirator.
· Hand protection

Protective gloves

The glove material has to be impermeable and resistant to the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· Material of gloves Suitable materials for safety gloves (EN 374):
· Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· Eye/face protection

Tightly sealed goggles

· Body protection: Solvent resistant protective clothing
· Environmental exposure controls No further data; see item 6 and 13.

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Printing date 13.03.2023 Version number 2 (replaces version 1) Revision: 13.03.2023

Trade name: **Recoat Silk Hardener**

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* SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information	
· Physical state	Fluid
· Colour:	Clear
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	≥190 °C (623-84-7 propane-1,2-diyl diacetate)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	≥2.8 Vol % (623-84-7 propane-1,2-diyl diacetate)
· Upper:	≤12.7 Vol % (623-84-7 propane-1,2-diyl diacetate)
· Flash point:	86-95 °C (623-84-7 propane-1,2-diyl diacetate)
· Ignition temperature:	≥431 °C (623-84-7 propane-1,2-diyl diacetate)
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	1 mPas
· Solubility	
· water:	Slightly soluble.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	<3 hPa (623-84-7 propane-1,2-diyl diacetate)
· Density and/or relative density	
· Density at 20 °C:	1.12 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.0 g/l 0.00 %
· Solids content:	65.0 %
· Change in condition	
· Evaporation rate	Not determined.

· 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

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· Desensitised explosives Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.
· 10.2 Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· 10.3 Possibility of hazardous reactions Reacts with strong oxidizing agents.
· 10.4 Conditions to avoid High temperatures.
· 10.5 Incompatible materials: Oxidizing agents
· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
· Acute toxicity Harmful if inhaled.
· LD/LC50 values relevant for classification:

666723-27-9 Hydophilic aliphatic polyisocyanate bases on HDI
Oral LD50 ≥5,000 mg/kg (rat) (OECD 423)

623-84-7 propane-1,2-diyl diacetate
Oral LD50 5,000 mg/kg (rat)
Dermal LD50 2,000 mg/kg (rab)
· Skin corrosion/irritation
May cause an allergic skin reaction.
Causes skin irritation.
· Serious eye damage/irritation Causes serious eye irritation.
· Respiratory or skin sensitisation May cause an allergic skin reaction.
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure May cause respiratory irritation.
· STOT-repeated exposure Based on available data, the classification criteria are not met.
· 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:

666723-27-9 Hydophilic aliphatic polyisocyanate bases on HDI
EC50 >10,000 mg/l (ac) (OECD 209)
ErC50/72h 72 mg/l (desmodesmus supspicatus) (OECD 201)
EC50/48h >100 mg/l (daphnia magna) (OECD 202)
LC50/96h 35.2 mg/l (Danio rerio) (OECD 203)
· 12.2 Persistence and degradability No further relevant information available.
· Degree of elimination:

666723-27-9 Hydophilic aliphatic polyisocyanate bases on HDI
BOD/28d 0 % (/) (OECD 301 F)
· 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: Harmful to fish

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· Additional ecological information:
· General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
· Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.
· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number
· ADR/ADN, IMDG, IATA Void
· 14.2 UN proper shipping name
· ADR/ADN, IMDG, IATA Void
· 14.3 Transport hazard class(es)

· ADR/ADN, ADN, IMDG, IATA
· Class Void
· 14.4 Packing group
· ADR/ADN, IMDG, IATA Void
· 14.5 Environmental hazards: Not applicable.
· 14.6 Special precautions for user Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments Not applicable.
· UN "Model Regulation": Void

SECTION 15: Regulatory information

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

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

· Other regulations, limitations and prohibitive regulations
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.
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information
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
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.
H412 Harmful to aquatic life with long lasting effects.

· Classification according to Regulation (EC) No 1272/2008

Acute toxicity - inhalation Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Department issuing SDS: Product safety department.
· Contact: Mrs. A. Derks
· Date of previous version: 16.05.2022
· Version number of previous version: 1
· Abbreviations and acronyms:
ADR: Accord relatif au transport international 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)
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 – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
· * Data compared to the previous version altered.