

Safety Data Sheet

according to Regulation (EC) No 1907/2006

OLI-NATURA Härter

Revision date: 17.06.2021

Product code: A03662

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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

Curing agent

1.3. Details of the supplier of the safety data sheet

Company name:	Oli Lacke GmbH	
Street:	Bahnhofstrase 22	
Place:	D-09244 Lichtenau	
Telephone:	+49(0)37208/84200	Telefax: +49(0)37208/84268
e-mail:	entwicklung@oli-lacke.de	
Internet:	www.oli-lacke.de	

1.4. Emergency telephone

Gemeins. Gifinformationszentrum Erfurt

number:

+49(0)361/730730

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Acute toxicity: Acute Tox. 4

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Harmful if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Hexamethylen-1,6-diisocyanat, Homopolymer

hexamethylene-di-isocyanate

Signal word: Warning**Pictograms:****Hazard statements**

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statements

P102 Keep out of reach of children.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special labelling of certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
28182-81-2	Hexamethylen-1,6-diisocyanat, Homopolymer	95 - <= 100 %
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335	
822-06-0	hexamethylene-di-isocyanate	< 1 %
	212-485-8	615-011-00-1
	Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H331 H315 H319 H334 H317 H335	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
28182-81-2		Hexamethylen-1,6-diisocyanat, Homopolymer	95 - <= 100 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists)	
822-06-0	212-485-8	hexamethylene-di-isocyanate	< 1 %
		inhalation: ATE = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists) Resp. Sens. 1; H334: >= 0,5 - 100 Skin Sens. 1; H317: >= 0,5 - 100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not wash with: Solvents/Thinner

After contact with eyes

Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. If

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accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Impaired consciousness

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

Immediately call a doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam. Carbon dioxide (CO₂). Extinguishing powder. Water mist

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke. Hazardous decomposition products: carbon black Danger of serious damage to health by prolonged exposure. Use appropriate respiratory protection.

5.3. Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Keep away from sources of ignition - No smoking. Provide adequate ventilation. In case of fire and/or explosion do not breathe fumes. Safe handling: see section 7 Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Observe in addition any national regulations! In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Other information

Prevent spread over a wide area (e.g. by containment or oil barriers). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean with detergents. Avoid solvent cleaners.

The contaminated area should be cleaned up immediately with: a mixture of 45% water, 50% ethanol or isopropyl alcohol, 5% concentrated ammonia solution (density 0.880)

Other: a mixture of 95% water and 5% sodium carbonate

Add the decontaminant to the remnants and let stand for several days in a non-sealed container until no further reaction is observed. Once reaction is finished, close container and dispose of.

6.4. Reference to other sections

See section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. Examination of lung function should be carried out on a regular basis on persons spraying this product.

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Even after use and until complete evaporation of the flammable components, there is still a danger of an explosive steam-air mixture forming. Only use the material in places where open light, fire and other flammable sources

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can be kept away. Take precautionary measures against static discharges. Use explosion-proof electrical equipment. Provide earthing of containers, equipment, pumps and ventilation facilities. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

Avoid contact with skin, eyes and clothes. Avoid: Inhalation of vapours or spray/mists, Inhalation of dust/particles When using do not eat, drink or smoke. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Never use pressure to empty container. Keep/Store only in original container.

Do not allow to enter into surface water or drains.

Advice on protection against fire and explosion

Concentrated vapours are heavier than air. Vapours may form explosive mixtures with air.

Further information on handling

Conditions to avoid : Avoid contact with water. Protect from moisture.

Formation of: Carbon dioxide (CO₂). Due to gaseous decomposition products, overpressure can occur in tightly sealed containers.

Observe in addition any national regulations!

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Betriebssicherheitsverordnung (BetrSichV)

Hints on joint storage

Do not store together with: Oxidising agent , Strong acid, Strong alkali , Amines, Water.

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Keep away from heat. Follow the instructions for use on the label. Keep container tightly closed in a cool, well-ventilated place. Protect from sunlight. Keep away from sources of ignition - No smoking. Store in a place accessible by authorized persons only. Always close containers tightly after the removal of product.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. Examination of lung function should be carried out on a regular basis on persons spraying this product.

8.2. Exposure controls**Appropriate engineering controls**

Use only in well-ventilated areas. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If technical exhaust or ventilation measures are not possible or insufficient , respiratory protection must be worn.

Protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink, smoke or sneeze at the workplace.

In dry state: Do not subject to grinding. Avoid dust formation. If possible, dampen before cutting or drilling.

Contains isocyanates. See information supplied by the manufacturer.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Tested protective gloves are to be worn: NBR (Nitrile rubber). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Use protective skin cream before handling the product.

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Skin protection

Protective clothing: Natural fibres (e.g. cotton) heat-resistant synthetic fibres

Respiratory protection

During spraying wear suitable respiratory equipment. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).
Combination filtering device. During spraying wear suitable respiratory equipment. Self-contained respirator (breathing apparatus)

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: liquid
Colour:

Test method**Changes in the physical state**

Flash point:	> 100 °C	DIN EN ISO 1523
Auto-ignition temperature:	460 °C	
Density (at 20 °C):	1,1 g/cm ³	ISO 2811
Solvent separation test:	< 3 %	

9.2. Other information

Solid content:	100 %
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SECTION 10: Stability and reactivity**10.1. Reactivity**

Response: After contact with water: Yes, slowly .
Formation of: Carbon dioxide (CO₂).

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reactions with: Alkalis (alkalis), concentrated. Acid, concentrated. Oxidizing agents, strong.Amines, Alcohols, Water.
Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. Danger of bursting container.

10.4. Conditions to avoid

Thermal decomposition can lead to the escape of irritating gases and vapours.

10.5. Incompatible materials

Exothermic reactions with: Alcohols, Amines.

10.6. Hazardous decomposition productsCarbon monoxide. Carbon dioxide. Nitrogen oxides (NO_x). Hydrocyanic acid (hydrocyanic acid).**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****ATEmix calculated**

ATE (inhalation vapour) 10,96 mg/l; ATE (inhalation aerosol) 1,496 mg/l

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Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
28182-81-2	Hexamethylen-1,6-diisocyanat, Homopolymer				
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
822-06-0	hexamethylene-di-isocyanate				
	inhalation vapour	ATE 3 mg/l			
	inhalation aerosol	ATE 0,5 mg/l			

Irritation and corrosivity

Irritating to skin.

Sensitising effects

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

Carcinogenic/mutagenic/toxic effects for reproduction

The components in this formulation do not meet the criteria for classification as CMR category 1 or 2.

Aspiration hazard

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

Additional information on tests

There are no data available on the preparation/mixture itself. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.7. Other adverse effects

There are no data available on the preparation/mixture itself.

Further information

There are no data available on the preparation/mixture itself. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.
Dispose according to legislation.

List of Wastes Code - residues/unused products

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080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****Other applicable information (land transport)**

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)**Other applicable information (inland waterways transport)**

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)**Other applicable information (marine transport)**

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)**Other applicable information (air transport)**

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

refer to chapter 7. No further action is necessary.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 74

2010/75/EU (VOC): 0 g/l

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Additional information

Observe in addition any national regulations!

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15.2. Chemical safety assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Acute Tox. 4; H332	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
EUH204	Contains isocyanates. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)