

Safety Data Sheet

according to UK REACH Regulation

OLI-CRYL Härter 11.4

Revision date: 19.04.2021

Product code: A01062

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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:	Bahnhofstrasse 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****GB CLP Regulation**

Flam. Liq. 3; H226
Acute Tox. 4; H332
Skin Sens. 1; H317
STOT SE 3; H335
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

Hexamethylen-1,6-diisocyanat, Homopolymer
n-butyl acetate

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

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.

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	
	Classification (GB CLP Regulation)			
28182-81-2	Hexamethylen-1,6-diisocyanat, Homopolymer			50 - < 55 %
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335			
123-86-4	n-butyl acetate			45 - < 50 %
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			

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	50 - < 55 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists)		

Further Information

The product contains less than 0.1% diisocyanate monomers and may therefore be used without additional training.

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 advice**

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.

Advice on general occupational hygiene

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.

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

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL

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.

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Individual protection measures, such as personal protective equipment**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.

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:	> 23 °C	DIN EN ISO 1523
Lower explosion limits:	0,7 vol. %	
Upper explosion limits:	8,0 vol. %	
Auto-ignition temperature:	370 °C	
Vapour pressure: (at 20 °C)	14 hPa	
Density (at 20 °C):	1,025 g/cm³	ISO 2811

9.2. Other information**Other safety characteristics**

Solvent separation test:	< 3 %
Solvent content:	48 %
Solid content:	52 %

Further Information**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.

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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 products

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Hydrocyanic acid (hydrocyanic acid).

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****ATEmix calculated**

ATE (inhalation dust/mist) 2,885 mg/l

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 dust/mist	ATE 1,5 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 substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

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

12.6. Endocrine disrupting properties

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This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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

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)

14.1. UN number or ID number:	UN 1263
14.2. UN proper shipping name:	Paint related material
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3
Classification code:	F1
Special Provisions:	163 640E 650
Limited quantity:	5 L
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Other applicable information (land transport)

E1

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1263
14.2. UN proper shipping name:	Paint related material
14.3. Transport hazard class(es):	3
14.4. Packing group:	III

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Hazard label: 3
 Classification code: F1
 Special Provisions: 163 640E 650
 Limited quantity: 5 L

Other applicable information (inland waterways transport)

E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3
 Special Provisions: 163, 223, 955
 Limited quantity: 5 L
 EmS: F-E, S-E

Other applicable information (marine transport)

E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1263
14.2. UN proper shipping name: Paint related material
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3
 Special Provisions: A3 A72
 Limited quantity Passenger: 10 L
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-max. quantity - Cargo: 220 L

Other applicable information (air transport)

Passenger-LQ: Y344

E1

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 40, Entry 75

2004/42/EC (VOC): 492 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 GB CLP Regulation**

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H332	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
STOT SE 3; H336	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
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.)