

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

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**SECTION 1 IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY/UNDERTAKING**

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- 1.1. Product identifier:  
Product name: ACRYLIC HARDENER SOLL UHS 25 (NORMAL)  
Product code: H UHS25 050, H UHS25 250
- 1.2. Relevant identified uses of the substance or mixture and uses advised against:  
Professional repairs of car body repairs.
- 1.3. Details of the supplier of the safety data sheet:  
Manufacturer/Distributor  
**UAB HELVINA**  
Parko str. 96  
LT-54464 Ramučiai, Kaunas district  
LITHUANIA  
Tel.: + 370 37 308901  
Fax: + 370 37 308902  
E-mail: info@helvina.lt  
www.helvina.lt
- 1.4. Emergency telephone number:  
Poison control and information office: Tel.: +370 5 236 2052 or +370 687 53378
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**SECTION 2 IDENTIFICATIN OF THREATS**

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- 2.1. Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008:  
H226 Flammable liquids, Hazard Category 3  
H317 Sensitisation — Skin, Hazard Category 1  
H312 Acute toxicity (dermal), Hazard Category 4  
H332 Acute toxicity (inhal.), Hazard Category 4  
H335 Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation
- 2.2. Label elements  
**Hazardous substances:**  
N-BUTYL ACETATE,  
2-BUTOXYETHYL ACETATE,  
HEXAMETHYLENE DIISOCYANATE, OLIGOMERS  
**Hazard pictograms:**



GHS02



GHS07

Signal Word: **WARNING!****Hazard Statement (H):**

- H226 Flammable liquid and vapour.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.  
EUH204 Contains isocyanates. May produce an allergic reaction.

**Precautionary Statement (P):**

- P260 Do not breath dust/fume/gas/mist/vapours/spray.

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P332+P304+P340 If skin irritation occurs: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P501 Dispose of contents/ container - dispose of in accordance with local/ regional/ national/ international regulations.

**Content:** HEXAMETHYLENE DIISOCYANATE, OLIGOMERS, 2-BUTOXYETHYL ACETATE,

2.3. Information concerning particular hazards for human and environment:

The components of the mixture are classified neither as PBT or vPvB in accordance with Annex XIII yet.  
 Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, maysthenia, drowsiness and in extreme cases loss of consciousness.  
 Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.  
 Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.  
 Chronic exposure:  
 In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

3.2. Mixtures:

Chemical name:	EEC No	CAS No	EU No	(%)	Regulation (EC) No 1272/2008	
					Hazard Class	Hazard statement
Hexamethylene diisocyanate, oligomers	-	28182-81-2	500-060-2	63-65	Skin Sens. 1 Acute Tox. 4 STOT Single	H317 H332 H335
Hexamethylene diisocyanate	615-011-00-1	822-06-0	212-485-8	<0,1	Acute Tox. 3 Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Resp. Sens. 1 Skin Sens. 1	H331 H319 H335 H315 H334 H317
n-butyl acetate	607-025-00-1	123-86-4	204-658-1	12-28	Flam. Liq. 3 STOT SE 3	H226 H336
2-butoxyethyl acetate	607-038-00-2	112-07-2	203-933-3	14-27	Acute Tox. 4 Acute Tox. 4 Acute Tox. 4	H302 H312 H332

Full meaning of phrases and symbols are in section 16.

### SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures:

Take normal precautionary measures applied during the handling of chemicals. In case of any symptoms, seek medical advice.

IN CASE OF INGESTION:

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

**Measures:**

- If swallowed, do not induce vomiting (risk of aspiration).
- Obtain immediate medical help.

**IN CASE OF INHALATION:****Measures:**

- Remove the affected person to fresh air, keep calm, cover with a blanket.
- In case of shortness of breath, give oxygen.
- If breathing has stopped, administer artificial respiration and obtain medical help.

**IN CASE OF SKIN CONTACT:****Measures:**

- Immediately flush with plenty of water.
- Take off all contaminated clothing.
- Wash skin with plenty of water and soap.
- In case of symptoms, obtain medical attention and show him the label!

**IN CASE OF EYE CONTACT:****Measures:**

- Remove contact lenses.
- Flush immediately with plenty of water for 15 minutes, holding the eyelids wide open.
- Consult an ophthalmologist.

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

Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, maysthenia, drowsiness and in extreme cases loss of consciousness.

Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.

Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.

**Chronic exposure:**

In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

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

No special antidote, apply symptomatic treatment.

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**SECTION 5 FIRE-FIGHTING MEASURES****5.1. Extinguishing media:****5.1.1. Suitable extinguishing media:**

Foam, carbon dioxide or dry chemical.

**5.1.2. Unsuitable extinguishing media:**

Strong water jet.

**5.2. Special hazards arising from the substance or mixture:**

In case of combustion, carbon oxide and toxic fumes are formed.

**5.3. Advice for firefighters:**

Wear full protective clothing (gas-tight and antistatic) and self-contained breathing apparatus.

Cool the fire affected containers with water spray.

Prevent penetration into ground and surface water. Prevent penetration of the fire extinguishing media into ground and surface water. Collect fire extinguishing media separately, do not discharge into sewage system.

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**SECTION 6 ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures:****6.1.1. For non-emergency personnel:**

Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

**6.1.2. For emergency responders:**

Remove all ignition sources, flames.

Protect sewage outlets.

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

Disperse vapours with water spray.

Stop leakage – close the source of the leakage, seal damaged container and place in an other container.

Ensure adequate ventilation.

Wear protective clothing and gloves.

Do not inhale vapours.

**6.2. Environmental precautions:**

Dispose of spillage and waste (product/packaging) in accordance with all applicable environmental laws. Do not allow to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

**6.3. Methods and material for containment and cleaning up:**

Absorb the spilled product with an inert substance (e.g.: sand or diatomaceous earth) and transfer into a sealed container, and send to an authorized waste disposal company. During disposal wear suitable personal protective equipment.

**6.4. Reference to other sections:**

For further and detailed information see section 8 and 13.

**SECTION 7 HANDLING AND STORAGE****7.1. Precautions for safe handling:**

Observe conventional hygiene precautions.

Avoid contact with skin and eyes.

Do not inhale vapours.

Do not eat, drink or smoke during the usage.

Technical measures:

Use only in well-ventilated places with exhaust ventilation.

Tools, equipments and containers must be sealed tightly.

Precautions against fire and explosion:

Keep away from heat and ignition sources.

**7.2. Conditions for safe storage, including any incompatibilities:**

Technical measures and storage condition:

Keep in original, tightly closed and labelled container.

The place of storage has to be properly ventilated and cleanable.

Store in cool and dry place.

Protect against sunlight.

Store below 20°C.

Do not store with self-igniting substances and peroxides.

Store in original, properly labelled containers, which are tightly sealed.

Do not smoke, eat, use open fire and sparking tools in the place of the storage.

Keep away from the reach of children.

Follow all instructions on the label.

Incompatible materials: strong oxidizing agents.

Packaging material: original container.

**7.3. Specific end use(s):**

No specific instructions available.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters:**

Substance name	CAS Nr.	8 hours		Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
n-butyl acetate	123-86-4	150	724	200	966
2-butoxyethyl acetate	112-07-2	20	147	50	367

**8.2. Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

**8.2.1 Appropriate engineering controls**

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

The suction of the vapours at the source(s) of emission and general exhaust ventilation is required. The exhaust vents should be placed in the upper part of the room and at the floor level.

Keep away from heat and ignition sources.

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

1. Eye/face protection: use adequate protective goggles.

2. Skin protection:

a. Hand protection: use impervious gloves.

b. Other: use impervious protective clothes.

3. Respiratory protection: if exposure is likely to exceed the occupational exposure, use approved respiratory protective equipment.

4. Thermal hazard: None known.

**8.2.3. Environmental exposure controls:**

No specific prescription.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES:****9.1. Information on basic physical and chemical properties**

Physical condition/form colour	Liquid of high viscosity; colorless
Odour	typical of solvents
Boiling point	124-128°C
Melting point:	<-50°C
Vapours pressure	No data
Solubility in water and other solvents	Very weak
Solubility in organic solvents	Butyl acetate – solubility limited
Specific gravity	No data
pH:	No data
Flash point	25°C
Explosive properties: limits	No data
Autoignition point	No data
Flammable	High viscosity liquids, flammable
Explosive properties: limits	Not explosive, no concern
Oxidizing properties	Not oxidizing, no concern
Distribution ratio 1-n-octanol/water	No data available
Other properties: viscosity	No data

**9.2. Other information:**

Density: ca. 1,0567 g/cm<sup>3</sup>

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**SECTION 10 STABILITY AND REACTIVITY****10.1. Reactivity:**

None known.

**10.2. Chemical stability:**

At normal temperature: stable at general conditions of work.

**10.3. Possibility of hazardous reactions:**

None known.

**10.4. Conditions to avoid:**

High temperature, fire.

**10.5. Incompatible materials:**

strong oxidizing agents.

**10.6. Hazardous decomposition products:**

In case of high temperature or fire, carbon oxides and toxic smoke may evolve.

**SECTION 11 TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects:**

Acute toxicity: Harmful by inhalation and in contact with skin.

Irritation: None known.

Corrosivity: None known.

Sensitisation: None known.

Repeated dose toxicity: Repeated exposure may cause skin dryness or cracking.

Carcinogenicity: None known.

Mutagenicity: None known.

Reproduction toxicity: None known.

**11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:**

No data available.

**11.1.2. Relevant toxicological properties of the hazardous substances:****Information on toxicological effects:**

<i>Name of the substance:</i>	<i>CAS-number:</i>	<i>Dose:</i>	<i>Value:</i>	<i>Unit:</i>
n-butyl acetate	123-86-4	LD <sub>50</sub> (rat, oral)	14000	mg/kg
		LD <sub>50</sub> (rat, dermal)	>5000	mg/kg
		LD <sub>50</sub> (rat, inhalation)	>51	mg/l/4h

**11.1.3. Information on likely routes of exposure:**

ingestion, inhalation, skin and eye contact.

**11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:**

Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, maysthenia, drowsiness and in extreme cases loss of consciousness.

Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.

Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.

Chronic exposure:

In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

**11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:**

Harmful by inhalation and in contact with skin.

Repeated exposure may cause skin dryness or cracking.

**11.1.6. Interactive effects:**

No data available.

**11.1.7. Absence of specific data:**

No information.

**11.1.8. Other information:**

No data available.

**SECTION 12 ECOLOGICAL INFORMATION****12.1. Toxicity:**

This mixture is classified as hazardous substances for the environment. Do not allow the product to enter drains, water and soil. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Aquatic toxicity:**

<i>Name of the substance:</i>	<i>CAS-number:</i>	<i>Method:</i>	<i>Value:</i>	<i>Unit:</i>
n-butyl acetate	123-86-4	LC <sub>50</sub> - fish ( <i>Leuciscus idus</i> )	62	mg/l/96h
		EC <sub>50</sub> invertebrates ( <i>Daphnia magna</i> )	73	mg/l/24h
		aquatic plants ( <i>Scenedesmus subspicatus</i> )	675	mg/l/72h
		EC <sub>10</sub> microorganisms / effect on activated sludge ( <i>Pseudomonas putida</i> )	115	mg/l/16h
hexamethylene diisocyanate, oligomers	28182-81-2	LC0- fish ( <i>brachydanio rerio</i> )	100	mg/l/96h
		EC0 algae ( <i>Daphnia magna</i> )	100	mg/l/48h

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

12.2. Persistence and degradability:

<i>Name of the substance:</i>	<i>CAS-number:</i>	
n-butyl acetate	123-86-4	Information on biodegradation: Test method: OECD 301D; 92/69/EEC, V, C.4 E, activated sludge Analytical method: BOD to the theoretical oxygen demand (ThOD) Degree of biodegradation: >90% (28d) Rating: Readily biodegradable. (according to OECD criteria)

12.3. Bioaccumulation potential:

No data available.

12.4. Mobility in soil:

No data available.

12.5. Results of PBT and vPvB assessment:

No data available.

12.6. Other adverse effects:

Information about the components:

**SECTION 13 DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods:

Disposal according to the local regulations.

## 13.1.1. Information regarding the disposal of the product:

Do not dispose with communal wastes, do not pour into drainage system. Incinerate in specially adapted installations or deliver to authorized waste collector.

European Waste Catalogue code:

08 01 00 wastes from MFSU and removal of paint and varnish

08 01 11\* waste paint and varnish containing organic solvents or other dangerous substances

\* hazardous waste.

## 13.1.2. Information regarding the disposal of the packaging

Used packaging should be delivered to authorized collector who has due permission within the range of waste management and especially in dangerous waste management.

European Waste Catalogue code:

For used packaging:

15 01 10\* packaging containing residues of or contaminated by dangerous substances

\* hazardous waste.

## 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:

None known.

## 13.1.4. Sewage disposal:

None known.

## 13.1.5. Special precautions for any recommended waste treatment:

No data available.

**SECTION 14 TRANSPORT INFORMATION****Land transport (ADR/RID)**

UN Number

UN1263

UN proper shipping name

PAINT, PAINT RELATED MATERIAL

Transport hazard class(es)

3

Label: 3

Hazard identification number: 30



Packing group

III.

Environmental hazards

NO

Tunnel restriction code

No data available.



**Marine transport IMDG/IMO**

UN Number

UN1263

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

UN proper shipping name	PAINT, PAINT RELATED MATERIAL
Transport hazard class(es)	3
	Label: 3
	
EmS code	F-E,S-E
Packing group	III.
Environmental hazards	NO
<b>Air transport IATA</b>	
UN Number	UN1263
UN proper shipping name	PAINT, PAINT RELATED MATERIAL
Transport hazard class(es)	3
	Label: 3
	Hazard identification number: 30
	
Packing group	III.
Environmental hazards	NO
Special precautions for user	No data available.

## SECTION 15 REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:  
 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC  
 COMMISSION REGULATION (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures  
 DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations  
 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006  
 COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 15.2. Chemical safety assessment: -

## SECTION 16 OTHER INFORMATION

Information regarding the revision of the safety data sheet: -  
Full text of the abbreviations in the safety data sheet:  
 DNEL: Derived no effect level.  
 PNEC: Predicted no effect concentration.  
 CMR effects: carcinogenicity, mutagenicity and toxicity for reproduction.  
 PBT: Persistent, bioaccumulative and toxic.  
 n.d.: not defined.  
 n.a.: Not applicable.

Relevant H-Phrases (number and full text) of Section 2 and 3:

H226 Flammable liquid and vapour.  
 H312 Harmful in contact with skin.  
 H315 Causes skin irritation.



**SAFETY DATA SHEET**

according to EC Regulation No. 453/2010, Annex II from 20.05.2010

Printing date: 26. 06. 2011

Date of revision: 01. 06. 2015

H332 Harmful if inhaled.  
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.  
H336 May cause drowsiness or dizziness.  
H335 May cause respiratory irritation.  
EUH204 Contains isocyanates. May produce an allergic reaction.

Flam. Liq. 3	Flammable liquids, Hazard Category 3
Acute Tox. 3	Acute toxicity (inhal.), Hazard Category 3
Acute Tox. 4	Acute toxicity (inhal.), Hazard Category 4
Skin Sens. 1	Sensitisation — Skin, Hazard Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2
Skin Irrit. 2	Skin corrosion/irritation, Hazard Category 2
Resp. Sens. 1	Respiratory/skin sensitization, Hazard Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation

Training instructions: -

Recommended restrictions on use (non-statutory recommendations by supplier): -

This safety data sheet had been prepared on the basis of information provided by the manufacturer. The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The MSDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required. Since the conditions of the handling, the storage and the disposal of this product are beyond the control of the manufacturer, the distributor or the preparer of this SDS, no warranty, expressed or implied, regarding the product described in this MSDS shall be created or inferred by any statement in this SDS. No responsibility is assumed regarding the accuracy, completeness or suitability of all or any of the information contained herein or the results to be obtained from the use thereof at the time of use. In no way shall the manufacturer, the distributor or the preparer of the be liable for any claims, losses or damages of third parties, personal injury, property damage, lost profits or any special, direct, indirect, incidental, consequential or exemplary damages resulting from the use of or reliance upon such information. Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.