

SAFETY DATA SHEET according to Regulation 1907/2006



Product name: **90.917 Hardener for 2K Ultra Fast Acryl, Slow**
Creation date: **2.2.2011** · Revision: **3.7.2019** · Version: **1**

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name

90.917 Hardener for 2K Ultra Fast Acryl, Slow

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

Relevant identified uses

Hardener.

Uses advised against

No information.

1.3. Details of the supplier of the safety data sheet

Manufacturer

SILCO, D.O.O.
Address: Šentrupert 5 a, 3303 Gomilsko, Slovenia
Phone: +386 3 703 3180
Fax: +386 3 703 3188
E-mail: n.cvilak@silco-automotive.com
Point of contact for safety info: Nejc Cvilak

1.4. Emergency telephone number

Emergency

112

Supplier

+386 3 703 3180



chemius.net/cvU9a

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Flam. Liq. 3; H226 Flammable liquid and vapour.
Skin Sens. 1; H317 May cause an allergic skin reaction.
STOT SE 3; H336 May cause drowsiness or dizziness.

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2.2 Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]



Signal word: **Warning**

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

P240 Ground and bond container and receiving equipment.

P272 Contaminated work clothing should not be allowed out of the workplace.

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.

P403 + P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with national regulation.

2.2.2. Contains:

1,6-hexamethylene diisocyanate homopolymer (CAS: 28182-81-2, EC: 500-060-2)

n-butyl acetate (CAS: 123-86-4, EC: 204-658-1, Index: 607-025-00-1)

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

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3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
1,6-hexamethylene diisocyanate homopolymer	28182-81-2 500-060-2 -	40-60	Skin Sens. 1; H317		-
n-butyl acetate	123-86-4 204-658-1 607-025-00-1	40-60	Flam. Liq. 3; H226 STOT SE 3; H336 EUH066		-
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7	15-30	Flam. Liq. 3; H226		-
2-butoxyethyl acetate	112-07-2 203-933-3 607-038-00-2	1-3	Acute Tox. 4; H312 Acute Tox. 4; H332		-
p-toluenesulphonyl isocyanate	4083-64-1 223-810-8 615-012-00-7	0-0,5	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 STOT SE 3; H335 EUH014	Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % STOT SE 3; H335: C ≥ 5 %	01-2119980050-47

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

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Following inhalation

Ventilate the premises. Inhale fresh air. Remove patient to fresh air - move out of dangerous area. Victim should rest in a warm place. If difficulties with breathing do not stop, search for medical help.

Following skin contact

Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Immediately consult a doctor.

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

Inhalation

-

Skin contact

No data available.

Eye contact

-

Ingestion

-

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

-

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SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂).
Fire extinguishing powder.
Foam.
Water spray.

Unsuitable extinguishing media

No special precautions required.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

-

5.3. Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area.

Special protective equipment for firefighters

self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Wear suitable protective face mask, protective gloves and clothing.

Emergency procedures

Ensure adequate ventilation.

6.1.2. For emergency responders

-

6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

-

6.3.2. For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

6.3.3. Other information

-

6.4. Reference to other sections

See also Sections 8 and 13.

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SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

-

Measures to prevent aerosol and dust generation

-

Measures to protect the environment

-

7.1.2. Advice on general occupational hygiene

Do not breathe vapours/mist. Consider measures required in Section 8 of this safety data sheet. Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Keep away from open fire, heat, sparks and direct sunlight. Keep in cool and well ventilated area.

7.2.2. Packaging materials

-

7.2.3. Requirements for storage rooms and vessels

-

7.2.4. Storage class

-

7.2.5. Further information on storage conditions

-

7.3. Specific end use(s)

Recommendations

Keep away from incompatible material (see section 10).

Industrial sector specific solutions

-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

Name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m ³ (ppm)	mg/m ³	ml/m ³ (ppm)	mg/m ³		
2-Butoxyethyl acetate (112-07-2)	20	133	50	332	Sk	
Butyl acetate (123-86-4)	150	724	200	966		
1-Methoxypropyl acetate (108-65-6)	50	274	100	548	Sk	

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8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

8.1.3. DNEL/DMEL values

No information.

8.1.4. PNEC values

No information.

8.2. Exposure controls

8.2.1. Appropriate engineering control

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Tight fitting protective goggles (EN 166).

Hand protection

Protective gloves (EN 374).

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). Filter type CEN/FFP-2(S) or CEN/FFP-3(S).

Thermal hazards

-

8.2.3. Environmental exposure controls

-

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	Physical state:	liquid
-	Colour:	colourless
-	Odour:	solvent like

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Important health, safety and environmental information

-	pH	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	No information.
-	Flash point	25 °C
-	Evaporation rate	No information.
-	Flammability (solid, gas)	No information.
-	Explosion limits (vol%)	No information.
-	Vapour pressure	No information.
-	Vapour density	No information.
-	Density	Density: 0,96 – 1,07 g/cm ³
-	Solubility	No information.
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	No information.
-	Explosive properties	No information.
-	Oxidising properties	No information.

9.2. Other information

-	Solid contents	49,3 %
-	Remarks:	

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

-

10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. Possibility of hazardous reactions

-

10.4. Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks.

10.5. Incompatible materials

Oxidants.

Strong acids. Alkali metal.

10.6. Hazardous decomposition products

Inflammable gases and vapours are generated. It may generate toxic gases on contact with oxidising mineral acids and powerful oxidising agents. It may generate flammable gases and powerful reducing agents on contact with metals.

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SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
n-butyl acetate (123-86-4)	oral	LD ₅₀	mouse		6 mg/kg		
n-butyl acetate (123-86-4)	oral	LD ₅₀	rat		10768 mg/kg		
2-methoxy-1-methylethyl acetate (108-65-6)	dermal	LD ₅₀	rat		5000 mg/kg		
2-methoxy-1-methylethyl acetate (108-65-6)	oral	LD ₅₀	rat		8532 mg/kg		
2-butoxyethyl acetate (112-07-2)	dermal	LD ₅₀	rat		1580 mg/kg		

(b) Skin corrosion/irritation

No information.

(c) Serious eye damage/irritation

No information.

(d) Respiratory or skin sensitisation

Additional information: May cause an allergic skin reaction.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

No information.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

No information.

(j) Aspiration hazard

No information.

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SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
n-butyl acetate (123-86-4)	EC ₅₀	32 mg/L	48 h	crustacea			
	LC ₅₀	18 – 19 mg/L	96 h	fish			
	LC ₅₀	62 mg/L	96 h	fish			
	LC ₅₀	185 mg/L	96 h	fish			
	LC ₅₀	18 mg/L	96 h	fish			
	LC ₅₀	100 mg/L	96 h	fish			
2-methoxy-1-methylethyl acetate (108-65-6)	LC ₅₀	100 – 180 mg/L	96 h	fish			
	EC ₅₀	500 mg/L	48 h	crustacea			

12.1.2. Chronic (long-term) toxicity

No information.

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

12.2.2. Biodegradation

No information.

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

No information.

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

12.7. Additional information

For product

Do not allow to reach ground water, water courses or sewage system.

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SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Recycle or dispose according to official regulations: to leave it to authorized collector/remover/transformer of hazardous waste.

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

13.1.2. Waste treatment-relevant information

-

13.1.3. Sewage disposal-relevant information

-

13.1.4. Other disposal recommendations

-

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

NO.

14.6. Special precautions for user

Limited quantities

5 L

Tunnel restriction code

(D/E)

IMDG flashpoint

25 °C, c.c.

IMDG EmS

F-E, S-E

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Goods may not be carried in bulk in bulk containers, containers or vehicles.



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SECTION 15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

-

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient

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LC₅₀ - Lethal Concentration to 50 % of a test population
LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

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List of relevant H phrases

H226 Flammable liquid and vapour.
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.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
EUH014 Reacts violently with water.
EUH066 Repeated exposure may cause skin dryness or cracking.



- Provided correct labelling of the product
- Compliance with the local legislation
- Provided correct classification of the product
- Provided adequate transport data

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.