TECPO

TECPO 2K Härter kurz_EN

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

1.1. Product identifier

Trade name

TECPO 2K Härter kurz_EN

Article No.

300239

UFI code

8VGT-1U8A-N008-E1UQ

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

Product type

PC9a - Coatings and paints, thinners, paint removers.

Relevant identified uses

Hardener.

SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites.
SU22 - Professional uses: Public domain (administration, education, entertainment, services, crafts-men).

Not suitable for use in

No further relevant information available.

1.3. Details of the supplier of the safety data sheet

Supplier

TECPO GmbH

Address
Dreherstraße 16-20

42899 Remscheid
Germany

Telephone
+49 2191 951 3305

Email
info@tecpo.de

Fax
+49 2191 951 33044

Web site
www.tecpo.de

Contact person
Baris Ünsal

1.4. Emergency telephone number

Poison center/Additional emergency number

+49 (0) 89 19240 (Available 24/7) - Poison Emergency Call Munich (Available for the public.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Flammable liquids, hazard category 3
Skin sensitisation, hazard category 1
Specific Target Organ Toxicity — Single exposure, hazard category 3 - respiratory tract irritation
Specific Target Organ Toxicity — Single exposure, hazard category 3 - narcosis

Hazard statements

H226, H317, H335, H336

Description

The product is classified and labeled according to the CLP regulation.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word
Warning

Hazard statements
H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Supplemental hazard statements
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH204 Contains isocyanates. May produce an allergic reaction.

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P312 Call a POISON CENTRE/doctor/ if you feel unwell.

More information
For professional users only.

Hazard-determining components of labeling:
Hexamethylene-1,6-diisocyanate homopolymer
n-butyl acetate
2-Methoxy-1-methyl ethyl acetate

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

The product does not contain any substances with endocrine-disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Specific concentration limits ATE	Note
n-butyl acetate	123-86-4 204-658-1 01-2119485493-29 607-025-00-1	50 - 100%	Flam. Liq. 3, STOT SE 3 - narcosis	H226, H336, EUH066 - -		-
Hexamethylene-1,6-diisocyanate homo-polymer	28182-81-2 931-274-8 01-2119485796-17 -	25 - 50%	Skin Sens. 1, Acute Tox. 4 - inhalation, STOT SE 3 - resp. tract irrit.	H317, H332, H335, EUH204 - -		-
2-methoxy-1-methyl-ethyl acetate	108-65-6 203-603-9 01-2119475791-29 607-195-00-7	2,5 - <10%	Flam. Liq. 3, STOT SE 3 - narcosis	H226, H336 - -		-
2-Butoxy-ethyl acetate	112-07-2 203-933-3 - 607-038-00-2	2,5 - <5%	Acute Tox. 4 - oral, Acute Tox. 4 - dermal, Acute Tox. 4 - inhalation	H302, H312, H332 - -		-

Product based on
Mixture of the substances listed below with additives not subject to labeling.

Substance additional information
For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures
Immediately remove any clothing contaminated with the product. In the event of breathing difficulties or respiratory arrest, initiate artificial respiration.

Inhalation
Get plenty of fresh air and consult a doctor to be on the safe side. If unconscious, place in recovery position and seek medical assistance immediately.

Skin contact
Wash off immediately with soap and water and rinse thoroughly.

Eye contact
Rinse opened eye for several minutes under running water. If symptoms persist consult a doctor if symptoms persist.

Ingestion
Consult a doctor if symptoms persist.

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 media
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam. foam.

Unsuitable extinguishing media
Full water jet.

5.2. Special hazards arising from the substance or mixture
Formation of toxic gases when heated or in case of fire.
Can be released in the event of a fire:
nitrogen oxides (NOx).
Carbon monoxide (CO).
Hydrogen cyanide (HCN).

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Put on the breathing apparatus.

Other
Fire residues and contaminated extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.

6.2. Environmental precautions
Collect and dispose of contaminated wash water.
Do not allow to enter drains/surface water/ground water.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, saw-dust). Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.
Contain and collect spilled material using a non-flammable absorbent (e.g., sand, soil, diatomaceous earth).
Pick up any spilled residue with the same substance and let it sit in an unsealed container for a few days until there is no longer any reaction.
Afterward, close the container and dispose of it in accordance with local regulations (see Chapter 13).

6.4. Reference to other sections
See SECTIONS 7+8+13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Preventive handling precautions
Use only in well-ventilated areas.
Ensure good ventilation/extraction at the workplace.
Avoid aerosol formation.

Notes on fire and explosion protection:
Keep ignition sources away - do not smoke.
Take action to prevent static discharges.

General hygiene
Do not eat, drink, smoke or take snuff at work. Wash hands before breaks and at the end of work.
Remove soiled, soaked clothing immediately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers:
Store only in the original container.

Storage instructions:
Do not store together with reducing agents, heavy metal compounds, acids, and alkalis.
Store separately from foodstuffs, luxury foods and animal feed.

Further information on storage conditions:
Keep container tightly closed.

Storage class according to TRGS 510: 3 (Flammable liquids)

7.3. Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

Additional information: The lists valid at the time of preparation were used as a basis.

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Short-term exposure limit ppm / mg/m³	Source	Remark	Year
2-Butoxy-ethyl acetate	112-07-2 203-933-3	10 / 65	- / -	TRGS 900	2(I); EU, DFG, H, Y, 11	-
n-butyl acetate	123-86-4 204-658-1	62 / 300	- / -	TRGS 900	2(I); AGS, Y	-
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9	50 / 270	- / -	TRGS 900	I(I); DFG, EU, Y	-
Hexamethylene-1,6-diisocyanate homopolymer	28182-81-2 931-274-8	- / -	- / 0,5	EBW TRGS 430		-

Biological limit values

Product/Substance name CAS No.	Parameter	Limit value	Test material	Sampling time	Source	Remark	Date
2-Butoxy-ethyl acetate 112-07-2	Butoxyacetic acid (after hydrolysis in creatinine)	150 mg/g creatinine	Urine	for long-term exposure: at the end of the shift after several previous shifts	TRGS 430		

DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
2-Butoxy-ethyl acetate (112-07-2/203-933-3)	DNEL	Chronic (long term) Inhalation	133 mg/m³	Workers	Systemic
2-Butoxy-ethyl acetate (112-07-2/203-933-3)	DNEL	Chronic (long term) Dermal	169 mg/kg bw/day	Workers	Systemic
n-butyl acetate (123-86-4/204-658-1)	DNEL	Chronic (long term) Dermal	11 mg/kg bw/day	Workers	Systemic
n-butyl acetate (123-86-4/204-658-1)	DNEL	Chronic (long term) Dermal	6 mg/kg bw/day	Consumers	Systemic
n-butyl acetate (123-86-4/204-658-1)	DNEL	Acute (short term) Inhalation	600 mg/m³	Workers	Systemic
n-butyl acetate (123-86-4/204-658-1)	DNEL	Acute (short term) Inhalation	300 mg/m³	Consumers	Systemic

8.2. Exposure controls

Appropriate engineering controls

see SECTION 7.

Personal Protective Equipment Symbols



Eye / face protection

Tightly sealed safety goggles

Hand protection
Selection of the glove material taking into account the breakthrough times, permeation rates and degradation.

Gloves must comply with the EN 374 standard.

The glove material must be impermeable and resistant to the product / substance / preparation.
Glove material: Butyl rubber.
Recommended material thickness: ≥ 0,7 mm

The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a mixture of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.

Penetration time of the glove material:
Penetration time of the glove material Value for permeation: Level 2
The exact breakthrough time must be obtained from the protective glove manufacturer and adhered to.

Other skin protection
Protective clothing

Respiratory protection
For short-term or low exposure, respiratory filter device; for intensive or prolonged exposure use self-contained breathing apparatus.
Recommended filter type: Filter A/P2 (EN 141, EN 143)

Environmental exposure controls
General protective and hygiene measures:
Apply solvent-resistant skin protection products before starting work.
Do not eat, drink, smoke or take snuff at work.
Remove soiled, soaked clothing immediately.
Wash hands before breaks and at the end of work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
According to product description

Odour
Characteristic.

Odour threshold
Not determined.

Melting point / freezing point
Not determined.

Boiling point or initial boiling point and boiling range
124 - 128 °C
Method
(123-86-4 n-butyl acetate)

Flammability
FLAMMABLE.

Lower and upper explosion limit
Lower: 1.2% by volume; Upper: 8.5% by volume (123-86-4 n-butyl acetate)

Flash point
27 °C

Auto-ignition temperature
315 °C
Method
DIN 51794

Decomposition temperature
Not determined.

pH
Not determined.

Kinematic viscosity
12 - 18 mm²/s

Viscosity, dynamic
Not determined.

Solubility
No data available

Water solubility
Not or only slightly miscible.

Partition coefficient n-octanol/water
Not determined.

Vapour pressure
10,7 hPa
Method
@ 20 °C (115-10-6 n-butyl acetate)

Density and/or relative density
0,974 g/cm³
Method
@ 20 °C

Relative density
Not determined.

Relative vapour density
Not determined.

Evaporation Rate
Not determined.

Explosive properties
The product is not explosive, but the formation of explosive vapor/air mixtures is possible.

Oxidising properties
Not applicable.

VOC %
63,92 %

Particle characteristics
No data available

Information on basic physical and chemical properties
Flammable liquid and vapour.

9.2. Other information
The product is not self-igniting.

SECTION 10: Stability and reactivity

10.1. Reactivity
No further relevant information available.

10.2. Chemical stability
No decomposition when used as intended.

10.3. Possibility of hazardous reactions
Reaction with alcohols, amines, aqueous acids, and aqueous bases.

10.4. Conditions to avoid
No further relevant information available.

10.5. Incompatible materials
No further relevant information available.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide
Possible in small amounts.
Nitrous gases
Hydrochloric acid (HCl).
Hydrogen cyanide (HCN).
Carbon monoxide (CO).
nitrogen oxides (NOx).

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.

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals
n-butyl acetate 123-86-4 / 204-658-1	LD50	13100 mg/kg	Oral	Rat
n-butyl acetate 123-86-4 / 204-658-1	LD50	>5000 mg/kg	Dermal	Rabbit
2-methoxy-1-methylethyl acetate 108-65-6 / 203-603-9	LD50	8532 mg/kg	Oral	Rat
2-Butoxy-ethyl acetate 112-07-2 / 203-933-3	LD50	1880 mg/kg	Oral	Rat
2-Butoxy-ethyl acetate 112-07-2 / 203-933-3	LD50	1480 mg/kg	Dermal	Rabbit

Skin corrosion/irritation

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
May cause respiratory irritation. May cause drowsiness or dizziness.

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
The product does not contain any substances with endocrine-disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity
No further relevant information available.

12.2. Persistence and degradability
No further relevant information available.

12.3. Bioaccumulative potential
No further relevant information available.

12.4. Mobility in soil

Mobility
No further relevant information available.

12.5. Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties
The product does not contain any substances with endocrine-disrupting properties.

12.7. Other adverse effects
No data available

Other
Do not allow undiluted product or large quantities of it to enter groundwater, watercourses or drains. into the sewage system.

German Water Class
WGK1 - slightly water endangering

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

The mentioned waste codes are recommendations based on the expected use of the product.
Must not be disposed of together with household waste. Do not allow to enter drains.

Packaging

Uncleaned packaging: Disposal in accordance with official regulations.
Recommended cleaning agent: Diluted lye

Waste code	Waste description
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

SECTION 14: Transport information

14.1. UN number

1263

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

PAINT RELATED MATERIAL (including paint thinning and reducing compound)

IMDG proper shipping name

PAINT RELATED MATERIAL (including paint thinning or reducing compound)

14.3. Transport hazard class(es)

Label

ADR/RID/ADN



3

IMDG



3

ADR / RID Class
3
Tunnel restriction code: D/E
Transportation category: 3

ADR / RID Classification code
F1

ADR / RID hazard identification number
30

IMDG Class
3

ADN Class
3

ADN Class Code
F1

14.4. Packing group
ADR / RID / ADN: III
IMDG: III

14.5. Environmental hazards
No.

IMDG Marine Pollutant
No.

14.6. Special precautions for user
Attention: Flammable liquid substances

IMDG EmS
F-E, S-E

14.7. Maritime transport in bulk according to IMO instruments
Not applicable.

Other

Additional information ADR-RID
Limited quantity: 5 L
Exempted quantity E1

Additional information IMDG
Limited quantity: 5 L
Exempted quantity E1

SECTION 15: Regulatory information

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

EU regulations

Directive 2012/18/EU - Named dangerous substances - ANNEX I
None of the ingredients are included.

Annex XVII (REACH):
The product is subject to the following restrictions according to Annex XVII, Regulation (EC) 1907/2006 (REACH): 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 are included.

Information on the SEVESO III Directive 2012/18/EU
P5c FLAMMABLE LIQUIDS

National regulations

Technical guidance on air:
Class: I / Share: < 1%
Class: NK / Share: 50 - 100 %

Water hazard classification : 1 - slightly water endangering

Storage class according to TRGS 510: 3 (Flammable liquids)

Substances of Very High Concern (SVHC) according to REACH, Article 57:
None of the ingredients are included.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
AGW - Occupational Exposure Limit (Arbeitsplatzgrenzwert)
ATE - Acute Toxicity Estimate
AwSV - Ordinance on Installations for Handling Substances Hazardous to Water
C&L - Einstufung und Kennzeichnung
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSR - Chemical Safety Report
DNEL - Derived No Effect Level
ECHA - European Chemicals Agency
GefStoffV - Hazardous Substances Ordinance (Gefahrstoffverordnung)
GHS - Globally Harmonized System
IMDG - International Maritime Dangerous Goods
International Air Transport Association
IUCLID - International Uniform Chemical Information Database
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LGK - Storage Class (Lagerklasse)
OEL - Occupational Exposure Lim
PBT - Persistent, Bioaccumulative and Toxic substance
PNEC - Predicted No Effect Concentration(s)
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SCBA - Self-Contained Breathing Apparatus
STOT - Specific Target Organ Toxicity
SVHC - Substances of Very High Concern
TRGS - Technische Regeln für Gefahrstoffe
UFI - Unique Formula Identifier
vPvB - Very Persistent and Very Bioaccumulative
WGK - Water Hazard Class (Wassergefährdungsklasse)

Phrase meaning

Flam. Liq. 3 - Flammable liquids, hazard category 3
Skin Sens. 1 - Skin sensitisation, hazard category 1
STOT SE 3 - resp. tract irrit. - Specific Target Organ Toxicity — Single exposure, hazard category 3 - respiratory tract irritation
STOT SE 3 - narcosis - Specific Target Organ Toxicity — Single exposure, hazard category 3 - narcosis
Acute Tox. 4 - oral - Acute toxicity, oral, hazard category 4
Acute Tox. 4 - dermal - Acute toxicity, dermal, hazard category 4
Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
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.

Other

Additional information

The information is based on our current state of knowledge, but does not constitute a guarantee of product properties and does not establish a contractual legal relationship. The recipient of our products is responsible for observing existing laws and regulations. The information in this safety data sheet corresponds to the best of our knowledge at the time of printing. The information is intended to provide you with guidelines for the safe handling of the product mentioned in this safety data sheet during storage, processing, transportation and disposal. The information is not transferable to other products. If the product is mixed, blended or processed with other materials
processed or subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise.

Manufacturer's notes

The data of the relevant components were taken from the latest safety data sheet of the upstream supplier.