

# SAFETY DATA SHEET

ACCORDING TO REGULATION (EC) 1907/2006



Product name: 9230 Hardener

Creation date: 01.04.2025, Revision: 01.04.2025, Version: 7.4

## Section 1: Identification of the substance/mixture and of the company/undertaking

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### 1.1 Product identifier

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**Product name**

9230 Hardener

**UFI:**

AFJT-808T-A00T-D8CM



<https://my.chemius.net/p/slwl7/en/pd/en>

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

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**Relevant identified uses**

Hardener.

**Uses advised against**

No information.

### 1.3 Details of the supplier of the safety data sheet

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**Supplier**

SILCO d.o.o.  
Sentrupert 5a  
3303 Gomilsko, Slovenia  
+386 3 703 3180  
msds@silco.si

### 1.4 Emergency Telephone Number

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**Emergency**

111

**Supplier**

112

## Section 2: Hazards identification

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### 2.1 Classification of the substance or mixture

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**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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**silco**<sup>®</sup>

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## 2.2 Label elements

### 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.

EUH204 Contains isocyanates. May produce an allergic reaction.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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 + P233 Store in a well-ventilated place. Keep container tightly closed.

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

#### Contains:

n-butyl acetate

Hexamethylene diisocyanate, oligomers

## 2.3 Other hazards

### PBT/vPvB

No information.

### Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

### Additional information

No information.

## Section 3: Composition/information on ingredients

### 3.1 Substances

For mixtures see 3.2.

### 3.2 Mixtures

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Name	CAS EC Index REACH	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits
<b>n- butyl aceta te</b>	123-86-4 204-658-1 607-025-00-1	40-70	Flam. Liq. 3; H226 STOT SE 3; H336 EUH066	/
<b>Hexa meth ylene diiso cyana te, oligo mers</b>	28182-81-2 500-060-2 -	25-50	Skin Sens. 1; H317 EUH204	/
<b>2- meth oxy- 1- meth yleth yl aceta te</b>	108-65-6 203-603-9 607-195-00-7	5-15	Flam. Liq. 3; H226	/
<b>xylene</b>	1330-20-7 215-535-7 601-022-00-9	0-10	Flam. Liq. 3; H226 Acute Tox. 4; H312 Skin Irrit. 2; H315 Acute Tox. 4; H332	/

## Section 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. Obtain professional medical help!

#### Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. 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! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Consult a physician! Show the physician the safety data sheet or label.

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

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### Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. Vapours may cause drowsiness and dizziness.

### Following skin contact

Contact with skin may cause irritation (redness, itching). May cause sensitisation by skin contact (itching, redness, rashes). Repeated exposure may cause dry skin or cracked skin.

### Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

### Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

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

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Treat symptomatically.

## Section 5: Firefighting measures

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### 5.1 Extinguishing media

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#### Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

Full water jet.

### 5.2 Special hazards arising from the substance or mixture

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#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

### 5.3 Advice for firefighters

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#### Protective actions

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Prolonged heating can cause an explosion. Vapours can form explosive mixtures with air. Reacts with water (moisture) release of carbon dioxide and pressure build-up may cause closed container to burst. Cool containers at risk with water spray. If possible remove containers from endangered area.

#### Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).

#### Additional information

No information.

## Section 6: ACCIDENTAL RELEASE MEASURES

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## **6.1 Personal precautions, protective equipment and emergency procedures**

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### **For non-emergency personnel**

#### **Protective equipment**

No information.

#### **Precautionary measures**

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

#### **Emergency procedures**

No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

#### **For emergency responders**

Use personal protective equipment.

## **6.2 Environmental precautions**

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Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

## **6.3 Methods and material for containment and cleaning up**

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### **For containment**

Stem the spill if this does not pose risks.

### **For cleaning up**

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Use only explosion-proof instruments and equipment. Use spark-proof tools. Prevent release into the sewer, water, basements or confined areas. Ventilate the premises. Do not rinse contaminated area with water or aqueous cleansing agents. Ensure ventilation of the containers in which waste is stored as CO<sub>2</sub> can be formed. Clean contaminated area with plenty of water.

### **Other information**

No information.

## **6.4 Reference to other sections**

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See also sections 8 and 13.

## **Section 7: Handling and storage**

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### **7.1 Precautions for safe handling**

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#### **Protective measures**

##### **Measures to prevent fire**

Ensure adequate ventilation. Keep away from sources of ignition - no smoking. Use spark-proof tools. Take precautionary measures against static discharges. Vapours are heavier than air and spread along the floor. They form explosive mixtures with air.

##### **Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

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## **Measures to protect the environment**

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

## **Other measures**

No information.

## **Advice on general occupational hygiene**

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8.

## **7.2 Conditions for safe storage, including any incompatibilities**

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### **Technical measures and storage conditions**

Keep in a cool, dry and well ventilated place. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep away from oxidising substances. Keep away from sources of ignition – no smoking. Keep away from moisture and water.

### **Packaging materials**

Store only in original container.

### **Requirements for storage rooms and vessels**

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

### **Storage temperature**

No information.

### **Storage class**

No information.

### **Further information on storage conditions**

No information.

## **7.3 Specific end use(s)**

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### **Recommendations**

No information.

### **Industrial sector specific solutions**

No information.

## **Section 8: Exposure controls/personal protection**

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### **8.1 Control parameters**

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#### **Occupational Exposure limit values**

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Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
<b>Xylene, o-,m-,p - or mixed isomers (1330-20-7)</b>	220	50	441	100	Sk, BMGV	650 mmol methyl hippuric acid/mol creatinine in urine - Post shift
<b>1-Methoxypropyl acetate (108-65-6)</b>	274	50	548	100	Sk	/
<b>Butyl acetate (123-86-4)</b>	724	150	966	200	/	/

## 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 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

## DNEL/DMEL values

### For product

No information.

### For components

Name	Type	Exposure route	exp. frequency	Remark	Value
<b>n-butyl acetate</b>	Worker	inhalation	long term systemic effects	/	300 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Worker	inhalation	short term systemic effects	/	600 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Worker	inhalation	long term local effects	/	300 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Worker	inhalation	short term local effects	/	600 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Worker	dermal	long term systemic effects	/	11 mg/kg bw/day

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Name	Type	Exposure route	exp. frequency	Remark	Value
<b>n-butyl acetate</b>	Worker	dermal	short term systemic effects	/	11 mg/kg bw/day
<b>n-butyl acetate</b>	Consumer	inhalation	long term systemic effects	/	35.7 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Consumer	inhalation	short term systemic effects	/	300 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Consumer	inhalation	long term local effects	/	35.7 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Consumer	inhalation	short term local effects	/	300 mg/m <sup>3</sup>
<b>n-butyl acetate</b>	Consumer	dermal	long term systemic effects	/	6 mg/kg bw/day
<b>n-butyl acetate</b>	Consumer	dermal	short term systemic effects	/	6 mg/kg bw/day
<b>n-butyl acetate</b>	Consumer	oral	long term systemic effects	/	2 mg/kg bw/day
<b>n-butyl acetate</b>	Consumer	oral	short term systemic effects	/	2 mg/kg bw/day
<b>Hexamethylene diisocyanate, oligomers</b>	Worker	inhalation	long term local effects	/	0.5 mg/m <sup>3</sup>
<b>Hexamethylene diisocyanate, oligomers</b>	Worker	inhalation	short term local effects	/	1 mg/m <sup>3</sup>
<b>2-methoxy-1-methylethyl acetate</b>	Worker	inhalation	long term systemic effects	/	275 mg/m <sup>3</sup>
<b>2-methoxy-1-methylethyl acetate</b>	Worker	inhalation	short term local effects	/	550 mg/m <sup>3</sup>
<b>2-methoxy-1-methylethyl acetate</b>	Worker	dermal	long term systemic effects	/	796 mg/kg bw/day
<b>2-methoxy-1-methylethyl acetate</b>	Consumer	inhalation	long term systemic effects	/	33 mg/m <sup>3</sup>

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Name	Type	Exposure route	exp. frequency	Remark	Value
<b>2-methoxy-1-methylethyl acetate</b>	Consumer	inhalation	long term local effects	/	33 mg/m <sup>3</sup>
<b>2-methoxy-1-methylethyl acetate</b>	Consumer	dermal	long term systemic effects	/	320 mg/kg bw/day
<b>2-methoxy-1-methylethyl acetate</b>	Consumer	oral	long term systemic effects	/	36 mg/kg bw/day
<b>2-methoxy-1-methylethyl acetate</b>	Consumer	oral	short term systemic effects	/	500 mg/kg bw/day
<b>xylene</b>	Worker	inhalation	long term systemic effects	/	221 mg/m <sup>3</sup>
<b>xylene</b>	Worker	inhalation	short term systemic effects	/	442 mg/m <sup>3</sup>
<b>xylene</b>	Worker	inhalation	long term local effects	/	221 mg/m <sup>3</sup>
<b>xylene</b>	Worker	inhalation	short term local effects	/	442 mg/m <sup>3</sup>
<b>xylene</b>	Worker	dermal	long term systemic effects	/	212 mg/kg bw/day
<b>xylene</b>	Consumer	inhalation	long term systemic effects	/	65.3 mg/m <sup>3</sup>
<b>xylene</b>	Consumer	inhalation	short term systemic effects	/	260 mg/m <sup>3</sup>
<b>xylene</b>	Consumer	inhalation	long term local effects	/	65.3 mg/m <sup>3</sup>
<b>xylene</b>	Consumer	inhalation	short term local effects	/	260 mg/m <sup>3</sup>
<b>xylene</b>	Consumer	dermal	long term systemic effects	/	125 mg/kg bw/day
<b>xylene</b>	Consumer	oral	long term systemic effects	/	12.5 mg/kg bw/day

**PNEC values**

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## For product

No information.

## For components

Name	Exposure route	Remark	Value
<b>n-butyl acetate</b>	fresh water	/	0.18 mg/L
<b>n-butyl acetate</b>	water, intermittent release	/	0.36 mg/L
<b>n-butyl acetate</b>	marine water	/	0.018 mg/L
<b>n-butyl acetate</b>	water treatment plant	/	35.6 mg/L
<b>n-butyl acetate</b>	fresh water sediment	dry weight	0.981 mg/kg
<b>n-butyl acetate</b>	marine water sediment	dry weight	0.098 mg/kg
<b>n-butyl acetate</b>	soil	dry weight	0.09 mg/kg
<b>Hexamethylene diisocyanate, oligomers</b>	fresh water	/	0.127 mg/L
<b>Hexamethylene diisocyanate, oligomers</b>	water, intermittent release	/	1.27 mg/L
<b>Hexamethylene diisocyanate, oligomers</b>	marine water	/	0.013 mg/L
<b>Hexamethylene diisocyanate, oligomers</b>	water treatment plant	/	88 mg/L
<b>Hexamethylene diisocyanate, oligomers</b>	fresh water sediment	dry weight	266701 mg/kg
<b>Hexamethylene diisocyanate, oligomers</b>	marine water sediment	dry weight	26670 mg/kg
<b>Hexamethylene diisocyanate, oligomers</b>	soil	dry weight	53183 mg/kg
<b>2-methoxy-1-methylethyl acetate</b>	fresh water	/	0.635 mg/L
<b>2-methoxy-1-methylethyl acetate</b>	water, intermittent release	/	6.35 mg/L
<b>2-methoxy-1-methylethyl acetate</b>	marine water	/	0.064 mg/L
<b>2-methoxy-1-methylethyl acetate</b>	water treatment plant	/	100 mg/L
<b>2-methoxy-1-methylethyl acetate</b>	fresh water sediment	dry weight	3.29 mg/kg
<b>2-methoxy-1-methylethyl acetate</b>	marine water sediment	dry weight	0.329 mg/kg
<b>2-methoxy-1-methylethyl acetate</b>	soil	dry weight	0.29 mg/kg
<b>xylene</b>	fresh water	/	0.327 mg/L

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Name	Exposure route	Remark	Value
<b>xylene</b>	water, intermittent release	/	0.327 mg/L
<b>xylene</b>	marine water	/	0.327 mg/L
<b>xylene</b>	water treatment plant	/	6.58 mg/L
<b>xylene</b>	fresh water sediment	dry weight	12.46 mg/kg
<b>xylene</b>	marine water sediment	dry weight	12.46 mg/kg
<b>xylene</b>	soil	dry weight	2.31 mg/kg

## 8.2 Exposure controls

### Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols.

#### Structural measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

### Personal protective equipment

#### Eye and face protection

Safety glasses with side protection (BS EN ISO 16321-1:2022).

#### Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The penetration time is determined by the protective glove manufacturer and must be observed.

### Appropriate materials

#### Skin protection

Protective antistatic clothing EN 1149 (1:2006, 2:1998 and 3:2004, 5:2008), protective antistatic shoes (EN 20345:2022). At high risk of skin exposure chemical suits (BS EN 13034:2005+A1:2009) and boots may be required (BS EN ISO 20345:2022+A1:2024).

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

#### Thermal hazards

No information.

### Environmental exposure controls

#### Substance/mixture related measures to prevent exposure

No information.

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**Instruction measures to prevent exposure**

No information.

**Organisational measures to prevent exposure**

No information.

**Technical measures to prevent exposure**

Do not allow product to reach drains, sewage systems or ground water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

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**Important health, safety and environmental information**

<b>Physical state</b>	liquid
<b>Shape</b>	No information.
<b>Colour</b>	colourless
<b>Odour</b>	No information.
<b>Odour threshold</b>	No information.
<b>Melting/freezing point or softening point</b>	No information.
<b>Boiling point or initial boiling point and boiling range</b>	No information.
<b>Flammability</b>	No information.
<b>Lower and upper explosion limit</b>	No information.
<b>Flash point</b>	23 °C
<b>Auto-ignition temperature</b>	No information.
<b>Decomposition temperature</b>	No information.
<b>pH</b>	Substance/mixture is non-soluble (in water). Does not apply
<b>Viscosity</b>	No information.
<b>Solubility</b>	No information.
<b>Partition coefficient n-octanol/water (log value)</b>	No information.
<b>Vapour pressure</b>	No information.
<b>Density</b>	0.97 kg/L
<b>Relative vapour/gas density</b>	No information.
<b>Particle characteristics</b>	No information.

### 9.2 Other information

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**Information with regard to physical hazard classes**

No information.

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## Other safety characteristics

**Weight organic solvents** 630 g/l

## Section 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Reacts with water: may cause overpressure in closed vessel (CO<sub>2</sub>).

### 10.2 Chemical stability

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

### 10.3 Possibility of hazardous reactions

Vapours and air can form flammable or explosive mixtures.

### 10.4 Conditions to avoid

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

### 10.5 Incompatible materials

Oxidants.

### 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

## Section 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### (a) Acute toxicity

##### For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
<b>n-butyl acetate</b>	dermal	LD <sub>50</sub>	rabbit	/	5000 mg/kg	/	/
<b>n-butyl acetate</b>	inhalation	LC <sub>50</sub>	rat	4 h	9.6 - 29.2 mg/l	/	dust/aerosol

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Name	Exposure route	Type	Species	Time	Value	Method	Remark
<b>n-butyl acetate</b>	oral	LD <sub>50</sub>	rat	/	4700 mg/kg	/	/
<b>Hexamethylene diisocyanate, oligomers</b>	oral	LD <sub>50</sub>	rat	/	> 5000 mg/kg	/	/
<b>Hexamethylene diisocyanate, oligomers</b>	dermal	LD <sub>50</sub>	rabbit	/	> 2000 mg/kg	/	/
<b>Hexamethylene diisocyanate, oligomers</b>	inhalation	LC <sub>0</sub>	rat	4 h	2.18 mg/l	/	/
<b>2-methoxy-1-methylethyl acetate</b>	oral	LD <sub>50</sub>	rat	/	8530 mg/kg	/	/
<b>2-methoxy-1-methylethyl acetate</b>	inhalation	LC <sub>50</sub>	rat	4 h	35.7 mg/l	/	vapour
<b>2-methoxy-1-methylethyl acetate</b>	dermal	LD <sub>50</sub>	rat	/	5000 mg/kg	/	/
<b>xylene</b>	oral	LD <sub>50</sub>	rat	/	> 3523 mg/kg	/	/
<b>xylene</b>	dermal	LD <sub>50</sub>	rabbit	/	4200 mg/kg	/	/
<b>xylene</b>	inhalation (vapours)	LC <sub>50</sub>	rat	4 h	29 mg/l	/	/

## Additional information

The product is not classified as acutely toxic.

## (b) Skin corrosion/irritation

No information.

## Additional information

The product is not classified as irritating to skin and eyes.

## (c) Serious eye damage/irritation

### For components

Name	Exposure route	Species	Time	result	Method	Remark
<b>2-methoxy-1-methylethyl acetate</b>	/	/	/	May cause irritation.	/	/

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**(d) Respiratory or skin sensitisation**

No information.

**Additional information**

May cause an allergic skin reaction. The product is not classified as sensitising.

**(e) (Germ cell) mutagenicity**

No information.

**(f) Carcinogenicity**

No information.

**(g) Reproductive toxicity**

No information.

**Summary of evaluation of the CMR properties**

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

**(h) STOT-single exposure**

No information.

**Additional information**

May cause drowsiness or dizziness. STOT SE (single exposure): Not classified.

**(i) STOT-repeated exposure**

No information.

**Additional information**

Repeated exposure may cause skin dryness or cracking. STOT RE (repeated exposure): Not classified.

**(j) Aspiration hazard**

No information.

**Additional information**

Aspiration hazard: Not classified.

**Symptoms related to the physical, chemical and toxicological characteristics**

No information.

**Interactive effects**

No information.

## 11.2 Information on other hazards

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**Endocrine disrupting properties**

The product does not contain substances with the potential for endocrine disorders.

**Other information**

No information.

## Section 12: Ecological information

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### 12.1 Toxicity

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**Acute (short-term) toxicity**

**For components**

# SAFETY DATA SHEET

ACCORDING TO REGULATION (EC) 1907/2006



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Name	Type	Value	Exposure time	Species	Organism	Method	Remark
<b>n-butyl acetate</b>	LC <sub>50</sub>	18 mg/L	96 h	fish	/	/	/
<b>n-butyl acetate</b>	EC <sub>50</sub>	44 mg/L	48 h	crustacea	/	/	/
<b>n-butyl acetate</b>	EC <sub>50</sub>	675 mg/L	72 h	algae	/	/	/
<b>Hexamet hylene diisocyan ate, oligomers</b>	EC <sub>50</sub>	100 mg/L	48 h	daphnia	/	/	/
<b>Hexamet hylene diisocyan ate, oligomers</b>	EC <sub>50</sub>	51 mg/L	72 h	algae	/	/	/
<b>2-methoxy-1-methylet hyl acetate</b>	LC <sub>50</sub>	100 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
<b>2-methoxy-1-methylet hyl acetate</b>	EC <sub>50</sub>	500 mg/L	48 h	crustacea	/	/	/
<b>xylene</b>	LC <sub>50</sub>	13.4 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	13.1 - 16.5 mg/L	96 h	fish	<i>Lepomis macrochirus</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	2661 - 4093 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	19 mg/L	96 h	fish	<i>Lepomis macrochirus</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	30.26 - 40.75 mg/L	96 h	fish	<i>Poecilia reticulata</i>	/	/

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Name	Type	Value	Exposure time	Species	Organism	Method	Remark
<b>xylene</b>	LC <sub>50</sub>	23.53 - 29.97 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	7711 - 9591 mg/L	96 h	fish	<i>Lepomis macrochirus</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	780 mg/L	96 h	fish	<i>Cyprinus carpio</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	> 780 mg/L	96 h	fish	<i>Cyprinus carpio</i>	/	/
<b>xylene</b>	LC <sub>50</sub>	13.5 - 17.3 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
<b>xylene</b>	EC <sub>50</sub>	3.82 mg/L	48 h	daphnia	/	/	/

## Chronic (long-term) toxicity

No information.

## 12.2 Persistence and degradability

### Abiotic degradation, physical- and photo-chemical elimination

No information.

### Biodegradation

No information.

## 12.3 Bioaccumulative potential

### Partition coefficient n-octanol/water (log value)

No information.

### Bioconcentration factor (BCF)

#### For components

Name	Species	Organism	Value	Duration	Evaluation	Method	Remark
<b>2-methoxy-1-methyl acetate</b>	organism	/	0.43	/	/	/	/

## 12.4 Mobility in soil

### Known or predicted distribution to environmental compartments

No information.

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## **Surface tension**

No information.

## **Adsorption/Desorption**

No information.

## **12.5 Results of PBT and vPvB assessment**

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No evaluation.

## **12.6 Endocrine disrupting properties**

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The product does not contain substances with the potential for endocrine disorders.

## **12.7 Other adverse effects**

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No information.

## **12.8 Additional information**

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### **For product**

Product is not classified as hazardous for environment. Do not allow to reach ground water, water courses or sewage system.

### **For components**

#### **2-methoxy-1-methylethyl acetate**

Water hazard class 1 (Self-assessment): slightly hazardous for water

## **Section 13: Disposal considerations**

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### **13.1 Waste treatment methods**

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#### **Product / Packaging disposal**

##### **Waste chemical**

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

##### **Waste codes / waste designations according to LoW**

No information.

##### **Packaging**

Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Uncleaned containers should not be perforated, cut or welded. Empty containers represent a fire hazard as they may contain flammable product residues and vapours.

##### **Waste codes / waste designations according to LoW**

No information.

##### **Waste treatment-relevant information**

No information.

##### **Sewage disposal-relevant information**

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No information.

### Other disposal recommendations

No information.

## Section 14: Transport information

ADR/RID	IMDG	IATA	ADN
<b>14.1 UN number or ID number</b>			
UN 1263	UN 1263	UN 1263	UN 1263
<b>14.2 UN proper shipping name</b>			
PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
<b>14.3 Transport hazard class(es)</b>			
3	3	3	3
			
<b>14.4 Packing group</b>			
III	III	III	III
<b>14.5 Environmental hazards</b>			
NO	NO	NO	NO
<b>14.6 Special precautions for user</b>			

# SAFETY DATA SHEET

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Product name: **9230 Hardener**

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ADR/RID	IMDG	IATA	ADN
Limited quantities 5 L Special provisions 163, 367, 650 Packing Instructions P001, IBC03, LP01, R001 Special packing provisions PP1 Transport category 3 Tunnel restriction code (D/E) Classification code F1	Limited quantities 5 L EmS F-E, <u>S-E</u> Flash point 23 °C	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y344 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 10 L Packing Instructions (Pkg Inst) 355 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 L Cargo Aircraft Only, Packing Instructions (CAO, Pkg Inst) 366 Special provisions A3, A72, A192 ERG code 3L	Limited quantities 5 L
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

## 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) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

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

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not applicable

## **Ingredients according to Regulation (EC) No 648/2004 on detergents**

No information.

## **Special instructions**

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

## **15.2 Chemical Safety Assessment**

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

## **Section 16: Other information**

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### **Indication of changes**

2.3 Other hazards

### **Key literature references and sources for data**

No information.

### **Abbreviations and acronyms**

ATE - Acute Toxicity Estimate  
ADR - 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

# SAFETY DATA SHEET

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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  
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

## 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.  
H332 Harmful if inhaled.  
H336 May cause drowsiness or dizziness.  
EUH066 Repeated exposure may cause skin dryness or cracking.  
EUH204 Contains isocyanates. May produce an allergic reaction.