

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006 (REACH)  
according to Regulation (EU) 2020/878



Article No.: 6 00013 00000 epple dilution 13  
Print date 09.05.2023 Revision date 09.05.2023  
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Article No. (manufacturer/supplier): 6 00013 00000  
Trade name/designation epple dilution 13  
Dilution  
UFI: X880-S016-Q00W-AT1V

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

**Relevant identified uses:**  
Product for cleaning or diluting sealants or adhesives.

**1.3. Details of the supplier of the safety data sheet**

**supplier (manufacturer/importer/downstream user/distributor)**

E. Epple & Co. GmbH  
Hertzstr. 8 Telephone: +49 7032 / 9771-17  
71083 Herrenberg Telefax: +49 7032 / 9771-60  
www.epple-chemie.de

**Department responsible for information:**

laboratory  
E-mail (competent person) labor@epple-chemie.de

**1.4. Emergency telephone number**

Information center against poisoning Bonn +49 (0) 228 / 19 240 (Advice in German)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.

**2.2. Label elements**

The product is classified and labelled according to EC directives or corresponding national laws.

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

**Hazard pictograms**



**Danger**

**Hazard statements**

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing vapours.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves.  
P370 + P378 In case of fire: Use extinguishing powder or sand to extinguish.  
P501 Dispose of contents / container to a certified waste management company.

**Hazard components for labelling**

butanone

**Supplemental hazard information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients**

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### 3.2. Mixtures

**Description** Solvents/Thinner

#### Hazardous ingredients

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

EC No.	REACH No.	weight-%
CAS No.	Designation	
Index No.	classification: // Remark	
201-159-0	01-2119457290-43	
78-93-3	butanone	74,9 - 100
606-002-00-3	Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336 / EUH066	

#### Additional information

Full text of classification: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

#### In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

#### Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

#### Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

#### Unsuitable extinguishing media

strong water jet

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

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

### 5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

## SECTION 6: Accidental release measures

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

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

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

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Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

**6.4. Reference to other sections**

Observe protective provisions (see section 7 and 8).

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advices on safe handling**

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

**Further information**

Vapours are heavier than air. Vapours form explosive mixtures with air.

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

**Requirements for storage rooms and vessels**

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Floors must be electrically conductive.

**Hints on joint storage**

Keep away from strongly acidic and alkaline materials as well as oxidizers.

**Further information on storage conditions**

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

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

Observe technical data sheet. Observe instructions for use.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limit values**

butanone

Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

TWA: 600 mg/m<sup>3</sup>; 200 ppm

STEL: 899 mg/m<sup>3</sup>; 300 ppm

**Additional information**

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

**DNEL:**

butanone

Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

DNEL long-term dermal (systemic), Workers: 1161 mg/kg

DNEL long-term inhalative (systemic), Workers: 600 mg/m<sup>3</sup>

DNEL long-term oral (repeated), Consumer: 31 mg/kg

DNEL acute dermal, short-term (local), Consumer: 412 mg/kg

DNEL long-term inhalative (systemic), Consumer: 106 mg/m<sup>3</sup>

**PNEC:**

butanone

\*

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Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

PNEC aquatic, freshwater: 55,8 mg/L  
PNEC aquatic, marine water: 55,8 mg/L  
PNEC aquatic, intermittent release: 55,8 mg/L  
PNEC sediment, freshwater: 284,7 mg/kg  
PNEC sediment, marine water: 284,7 mg/kg  
PNEC, soil: 22,5 mg/kg

8.2. **Exposure controls** \*

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

**Personal protection equipment**

**Respiratory protection**

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Use filter / combination filter according to EN 14387.

Suitable respiratory protection apparatus: Gas filter type A

**Hand protection**

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

**Eye/face protection**

Wear eye glasses with side protection according to EN 166.

**Body protection**

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

**Protective measures**

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

**Environmental exposure controls**

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

**SECTION 9: Physical and chemical properties**

9.1. **Information on basic physical and chemical properties**

<b>Physical state:</b>	Liquid
<b>Appearance:</b>	Liquid
<b>Colour:</b>	translucent
<b>Odour:</b>	Ketone
<b>Odour threshold:</b>	not applicable
<b>Melting point/freezing point:</b>	-86 °C
<b>Initial boiling point and boiling range:</b>	80 °C
<b>Flammability:</b>	Highly flammable liquid and vapour.
<b>Lower and upper explosion limit:</b>	
Lower explosion limit:	1,5 Vol-%
Upper explosion limit:	11,5 Vol-%
<b>Flash point:</b>	-4 °C
<b>Auto-ignition temperature:</b>	475 °C
<b>Decomposition temperature:</b>	not applicable
<b>pH at 20 °C:</b>	not relevant
<b>Cinematic viscosity (40°C):</b>	< 20 mm <sup>2</sup> /s
<b>Viscosity at 20 °C:</b>	11 s 4 mm

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Method: DIN 53211

**Solubility(ies):**  
**Water solubility at 20 °C:** partially miscible  
**Partition coefficient: n-octanol/water:** see section 12  
**Vapour pressure at 20 °C:** 105 mbar  
**Density and/or relative density:**  
**Density at 20 °C:** 0,81 g/cm<sup>3</sup>  
**Relative vapour density:** not applicable  
**particle characteristics:** not applicable

9.2. **Other information**

**SECTION 10: Stability and reactivity**

10.1. **Reactivity**

No information available.

10.2. **Chemical stability**

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**

not applicable

10.6. **Hazardous decomposition products**

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

**SECTION 11: Toxicological information**

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

**Acute toxicity**

butanone

oral, LD50, Rat: 2193 mg/kg

Method: OECD 403

dermal, LD50, Rabbit: 8050 mg/kg

Method: OECD 402

**Skin corrosion/irritation; Serious eye damage/eye irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Based on available data, the classification criteria are not met.

**STOT-single exposure; STOT-repeated exposure**

May cause drowsiness or dizziness.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Practical experience/human evidence**

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

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**Overall assessment on CMR properties**

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

**Remark**

There is no information available on the preparation itself .

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No information available.

**SECTION 12: Ecological information**

Classification according to Regulation (EC) No 1272/2008 [CLP]  
Do not allow to enter into surface water or drains.

**12.1. Toxicity**

butanone

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 2993 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 308 mg/L (48 h)

Method: OECD 202

**12.2. Persistence and degradability**

butanone

oxygen consumption: 98 % (28 d)

\*

**12.3. Bioaccumulative potential**

butanone

Partition coefficient: n-octanol/water: 0,3

\*

**12.4. Mobility in soil**

Toxicological data are not available.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Appropriate disposal / Product Recommendation**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Observe in addition any national regulations!

**List of proposed waste codes/waste designations in accordance with EWC**

140603\* other solvents and solvent mixtures

\*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

**Appropriate disposal / Package**

**Dispose of packaging and contaminated filters at a official hazardous waste incinerator facility.**

Recommendation:

Waste codes / waste designations according to EWC / AVV: 15 01 10\*

Non-contaminated packages may be recycled.

**SECTION 14: Transport information**

**14.1. UN number or ID number**

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UN 1193

**14.2. UN proper shipping name**

Land transport (ADR/RID): Ethyl methyl ketone  
Sea transport (IMDG): ETHYL METHYL KETONE (METHYL ETHYL KETONE )  
Air transport (ICAO-TI / IATA-DGR): Ethyl methyl ketone

**14.3. Transport hazard class(es)**

3

**14.4. Packing group**

II

**14.5. Environmental hazards**

Land transport (ADR/RID) not applicable  
Marine pollutant not applicable

**14.6. Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

**Further information**

**Land transport (ADR/RID)**

Tunnel restriction code D/E

**Sea transport (IMDG)**

EmS-No. F-E, S-D

**14.7. Maritime transport in bulk according to IMO instruments**

No transport as bulk according IBC - Code.

**SECTION 15: Regulatory information**

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

**EU legislation**

**Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]**

VOC-value (in g/L): 805

**National regulations**

**Restrictions of occupation**

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

**Further details:**

For professional use only. Product is not intended for consumer use.

**Substance/product listed in the following inventories:**

AICS listed  
DSL listed  
EHS no information  
IECSC listed  
KECI listed  
MITI listed  
NZLoC listed  
PICCS listed  
TCSI listed  
TSCA listet

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**15.2. Chemical Safety Assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
201-159-0 78-93-3	butanone	01-2119457290-43

**SECTION 16: Other information**

**Full text of classification in section 3**

Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.

**Abbreviations and acronyms**

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

**Further information**

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

\* Data changed compared with the previous version