# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

ΕN 13.04.2023 Page 1 / 9 Version



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

**Product identifier** 

6 00011 00000 Article No. (manufacturer/supplier): Trade name/designation epple dilution 11

UFI: 2380-R0NE-300X-03VR

#### 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

Telephone: +49 7032 / 9771-17 Hertzstr 8 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. Eve 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**

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

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

Ethyl acetate

# Supplemental hazard information

**FUH066** Repeated exposure may cause skin dryness or cracking.

#### 2.3. Other hazards

No information available.

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

#### 3.2. **Mixtures**

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

Version 13.04.2023



ΕN Page 2 / 9

Solvents/Thinner Description

#### **Hazardous ingredients**

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

EC No.	REACH No.	
CAS No.	Designation	weight-%
Index No.	classification: // Remark	_
205-500-4	01-2119475103-46	
141-78-6	Ethyl acetate	74,9 - 100
607-022-00-5	Eye Irrit. 2 H319 / STOT SE 3 H336 / Flam. Lig. 2 H225 / 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.

## 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**

## **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.

## 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**

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

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

### **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.

## Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

13.04.2023 Version



ΕN Page 3 / 9

for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

#### Reference to other sections

Observe protective provisions (see section 7 and 8).

## **SECTION 7: Handling and storage**

## 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.

## Specific end use(s)

Observe technical data sheet. Observe instructions for use.

# SECTION 8: Exposure controls/personal protection

## **Control parameters**

## Occupational exposure limit values

Ethyl acetate

Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

TWA: 730 mg/m3; 200 ppm STEL: 1460 mg/m3; 400 ppm

#### Additional information

TWA: Long-term occupational exposure limit value STEL: short-term occupational exposure limit value

Ceiling: peak limitation

## **DNEL:**

## Ethyl acetate

Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

DNEL short-term oral (acute), Workers:

DNEL long-term dermal (systemic), Workers: 63 mg/kg bw/day

DNEL acute inhalative (local), Workers: 1468 mg/m<sup>3</sup> DNEL acute inhalative (systemic), Workers: 1468 mg/m<sup>3</sup> DNEL long-term inhalative (local), Workers: 734 mg/m<sup>3</sup> DNEL long-term inhalative (systemic), Workers: 734 mg/m<sup>3</sup>

DNEL short-term oral (acute), Consumer:

DNEL long-term dermal (systemic), Consumer: 37 mg/kg bw/day

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

Version 9.0 13.04.2023



EN Page 4 / 9

## PNEC:

Ethyl acetate

Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

PNEC aquatic, freshwater: 0,26 mg/L PNEC aquatic, marine water: 0,026 mg/L PNEC aquatic, intermittent release: 1,65 mg/L PNEC sediment, freshwater: 1,25 mg/kg PNEC sediment, marine water: 0,125 mg/kg

PNEC, soil: 0,24 mg/kg

PNEC sewage treatment plant (STP): 650 mg/L

## 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 combination filters according to EN 14387. Suitable respiratory protection apparatus: ABEK-P2

## 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

Physical state: Liquid
Appearance: Liquid
Colour: translucent

Odour: ester

Odour threshold: not applicable

Melting point/freezing point: -83 °C Initial boiling point and boiling range: 77 °C

Flammability: Combustible liquid.

Lower and upper explosion limit:

Lower explosion limit: 2 Vol-% Upper explosion limit: 12,8 Vol-% Flash point: -4 °C Auto-ignition temperature: 470 °C

Decomposition temperature: not applicable pH at 20 °C: not relevant

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

Version 9.0 13.04.2023





Cinematic viscosity (40°C): < 20 mm²/s

Viscosity at 20 °C: 11 s 4 mm

Method: DIN 53211

Solubility(ies):

Water solubility at 20 °C: insoluble

Partition coefficient: n-octanol/water: see section 12

Vapour pressure at 20 °C: 98,4 mbar

Density and/or relative density:

Density at 20 °C: 0,90 g/cm³

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**

Ethyl acetate

oral, LD50, Rat: > 2000 mg/kg

dermal, LD50, Rabbit: > 18000 mg/kg

inhalative (vapours), LC50, Rat: > 22,5 mg/L (6 h); Evaluation The substance or mixture has no acute respiratory toxicity

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

Causes serious eye irritation.

Ethyl acetate

Skin, Rabbit (4 h): Evaluation non-irritant. eyes, Rabbit: Evaluation mild irritant.

Method: OECD 405

# Respiratory or skin sensitisation

Ethyl acetate

Skin, Skin sensitization according to Magnusson/Kligman (maximization test), Guinea pig: ; Evaluation not sensitising.

Method: OECD 406

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

Ethyl acetate

Reproductive toxicity; Evaluation From the available data there are no indications of reproductive toxicity. genotoxicity; Evaluation No evidence of a mutagenic effect.

Method: OECD 471 (Ames test)

in-vitro; Salmonella typhimurium; with and without metabolic activation

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

Version 13.04.2023

ΕN Page 6 / 9



genotoxicity; Evaluation negative

Method: OECD 473

in-vitro; Chinese hamster ovary cells; with and without metabolic activation

genotoxicity: Evaluation negative

Method: OECD 476

in-vitro: mouse lymphoma cells: with and without metabolic activation

genotoxicity; Evaluation negative

Method: OECD 474 in-vivo: Mouse

# 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, fatique, 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.

## 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

Ethyl acetate

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 230 mg/L (96 h)

Flow test

Daphnia toxicity, EC50, Daphnia cucullata: 165 mg/L (48 h)

aquatic, freshwater

Algae toxicity, ErC50, Desmodesmus subspicatus: > 100 mg/L (72 h)

Method: OECD 201

Bacteria toxicity, NOEC:, Pseudomonas putida: 650 mg/L (16 h)

Method: DIN 38412

Fish toxicity, EC50: 220 mg/L (96 h)

Daphnia toxicity, EC50, Artemia salina: 346 mg/L (24 h)

aquatic, marine water Long-term Ecotoxicity

Ethyl acetate

Fish toxicity, NOEC, Pimephales promelas (fathead minnow): < 9,65 mg/L (32 d)

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 2,4 mg/L (21 d)

Bacteria toxicity, NOEC, Pseudomonas putida: 650 mg/L (16 h)

Method: DIN 38412

## 12.2. Persistence and degradability

Ethyl acetate

Biodegradation, aerobic: 69 % (20 d); Evaluation Readily biodegradable

oxygen consumption: 62 % (5 d)

## 12.3. Bioaccumulative potential

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: 6 00011 00000 epple dilution 11

Print date 13.04.2023 Revision date 13.04.2023

Version 9.0 13.04.2023





Ethyl acetate

Partition coefficient: n-octanol/water: 0,68

## **Bioconcentration factor (BCF)**

Fthyl acetate

Bioconcentration factor (BCF), Leuciscus idus (golden orfe): 30

#### 12.4. Mobility in soil

Ethyl acetate

soil, Adsorption: Evaluation Due to the low n-octanol/water distribution coefficient, adsorption on the ground is not to be expected.

#### 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 offical 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

UN 1173

14.2. UN proper shipping name

Land transport (ADR/RID): Ethyl acetate
Sea transport (IMDG): ETHYL ACETATE
Air transport (ICAO-TI / IATA-DGR): Ethyl acetate

14.3. Transport hazard class(es)

3

14.4. Packing group

Ш

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

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

Article No.: Print date Version 6 00011 00000 13.04.2023 epple dilution 11

Revision date 13.04.2023

13.04.2023



EN Page 8 / 9

#### **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): 902

## **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

### 15.2. Chemical Safety Assessment

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

EC No.	Designation	REACH No.	
CAS No.			
205-500-4	Ethyl acetate	01-2119475103-46	
141-78-6	•		

# **SECTION 16: Other information**

## Full text of classification in section 3

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.
Flam. Liq. 2 / H225 Flammable liquids Highly flammable liquid and vapour.

# 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

Version

# according to Regulation (EC) No. 1907/2006 (REACH) according to Regulation (EU) 2020/878

epple dilution 11 6 00011 00000 Article No.: Print date 13.04.2023 Revision date 13.04.2023

> Carcinogenic, Mutagenic and Reprotoxic **CMR**

13.04.2023

DIN German Institute for Standardization / German industrial standard **DNEL** Derived No-Effect Level

FAKV European Waste Catalogue Directive

Effective Concentration EC EC **European Community** ΕN 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

Organisation for Economic Cooperation and Development **OECD** 

persistent, bioaccumulative, toxic PBT **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



ΕN

Page 9 / 9