

Safety data sheet according to 1907/2006/EC, Article 31



Printing date 01.06.2015

Revision: 01.06.2015

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

- **1.1 Product identifier**
 - **Trade name: Palaclean**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture** Cleaning material/ Detergent
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau
Tel.: 0800 4372522
 - **Informing department:** E-Mail: msds@kulzer-dental.com
- **1.4 Emergency telephone number:**
Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
void
Xi; Irritant
R36: Irritating to eyes.
F; Highly flammable
R11: Highly flammable.
R67: Vapours may cause drowsiness and dizziness.
 - **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Has a narcotizing effect.
 - **Classification system:**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**


 GHS02 GHS07
 - **Signal word** Danger
 - **Hazard-determining components of labelling:**
ethyl acetate
 - **Hazard statements**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

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Precautionary statements

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P243 Take precautionary measures against static discharge.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards -

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization: Mixtures

Description: -

Dangerous components:

CAS: 141-78-6	ethyl acetate	95 - 100%
EINECS: 205-500-4	Xi R36; F R11	
	R66-67	
	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	

Additional information For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Take affected persons out of danger area and instruct to lie down.
Instantly remove any clothing soiled by the product.

After inhalation

Supply fresh air; consult doctor in case of symptoms.
In case of unconsciousness bring patient into stable side position for transport.

After skin contact

Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; instantly call for medical help.
A person vomiting while lying on their back should be turned onto their side.

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 agents

Fire-extinguishing powder
Carbon dioxide

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- Alcohol-resistant foam
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
 - Can form explosive gas-air mixtures.
 - Carbon monoxide (CO)
 - Carbon dioxide (CO₂)
 - Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
 - **Protective equipment:**
 - Wear self-contained breathing apparatus.
 - Wear full protective suit.
 - **Additional information -**

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation
 - Keep away from ignition sources
 - Use breathing protection against the effects of fumes/dust/aerosol.
 - Avoid contact with eyes and skin.
- **6.2 Environmental precautions:**
 - Inform respective authorities in case product reaches water or sewage system.
 - Prevent material from reaching sewage system, holes and cellars.
- **6.3 Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
 - Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
 - See Section 7 for information on safe handling
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 - Avoid contact with eyes and skin.
 - Wear protective equipment. Keep unprotected persons away.
 - Keep containers tightly sealed.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - **Information about protection against explosions and fires:**
 - Fumes can combine with air to form an explosive mixture.
 - Use only in explosion-proof area.
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and containers:**
 - Provide solvent resistant, sealed floor.
 - Store in cool location.
 - **Information about storage in one common storage facility:** Store away from foodstuffs.
 - **Further information about storage conditions:**
 - Store container in a well ventilated position.
 - Store in cool, dry conditions in well sealed containers.
 - Protect from heat and direct sunlight.

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· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1 Control parameters**

· **Components with critical values that require monitoring at the workplace:**

141-78-6 ethyl acetate

WEL	Short-term value: 400 ppm Long-term value: 200 ppm
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· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Avoid contact with the eyes.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

· **Breathing equipment:**

Use breathing protection only when aerosol or mist is formed.
Filter A/P2.
Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Recommended thickness of the material: ≥ 0.5 mm
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.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Butyl rubber, BR

· **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR
Natural rubber, NR

· **Eye protection:** Tightly sealed safety glasses.

· **Body protection:** Solvent resistant protective clothing

· **Limitation and supervision of exposure into the environment**

Do not allow to enter drainage system, surface or ground water.
Do not allow to enter the ground/soil.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Fluid
· Colour:	Colourless
· Smell:	Fruit-like
· Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	77 °C

· Flash point: -4 °C

· Ignition temperature: 460 °C

· Decomposition temperature: Not determined.

· Self-inflammability: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

· Critical values for explosion:

· Lower:	2.1 Vol %
· Upper:	11.5 Vol %

· Steam pressure at 20 °C: 102 hPa

· Density at 20 °C 0.901 g/cm³

· Relative density Not determined.

· Vapour density Not determined.

· Evaporation rate Not determined.

· Solubility in / Miscibility with

· Water at 20 °C: 61 g/l

· Partition coefficient (n-octanol/water): 0.6 log POW

· Viscosity:

· dynamic at 20 °C: 0.44 mPas

· 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions No dangerous reactions known

· 10.4 Conditions to avoid Heat, flames and sparks.

· 10.5 Incompatible materials: Strong oxidizers

· 10.6 Hazardous decomposition products:

Ethanoic acid

In case of fire the following can be released:

Carbon monoxide and carbon dioxide

· Additional information: -

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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

- **141-78-6 ethyl acetate**

Oral	LD50	5600 mg/kg (rat)
Dermal	LD50	18000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** Irritant effect.

- **Sensitization:** No sensitizing effect known.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

- **141-78-6 ethyl acetate**

EC50/48h	3300 mg/l (algae)
	717 mg/l (daphnia) (DIN 38412)
LC50/96h	230 mg/l (fish)

- **12.2 Persistence and degradability** Easily biodegradable

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

- Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

UN1173

- **14.2 UN proper shipping name**

- **ADR**

1173 ETHYL ACETATE, solution

- **IMDG, IATA**

ETHYL ACETATE, solution

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· 14.3 Transport hazard class(es)**· ADR****· Class**

3 (F1) Flammable liquids.

· Label

3

· IMDG, IATA**· Class**

3 Flammable liquids.

· Label

3

· 14.4 Packing group**· ADR, IMDG, IATA**

II

· 14.5 Environmental hazards:**· Marine pollutant:**

No

· 14.6 Special precautions for user

Warning: Flammable liquids.

· Kemler Number:

33

· EMS Number:

F-E, S-D

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

-

· ADR**· Transport category**

2

· Tunnel restriction code

D/E

· UN "Model Regulation":

UN1173, ETHYL ACETATE, solution, 3, II

SECTION 15: Regulatory information**· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

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*R67 Vapours may cause drowsiness and dizziness.***· Abbreviations and acronyms:***RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**ICAO: International Civil Aviation Organization**ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonized System of Classification and Labelling of Chemicals**ELINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**Flam. Liq. 2: Flammable liquids, Hazard Category 2**Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2**STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3***· * Data compared to the previous version altered.**

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