

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Universal Adhesive

Revision date: 07/31/2023

Product code: 14200_Series

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1. Identification

Product identifier

Universal Adhesive

Further trade names

Universal Adhesive (14206)

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Adhesive for Kettenbach addition-curing impression material and reline impression materials.

Medical device for use in dentistry, observe instructions for use.

Details of the supplier of the safety data sheet

Company name: Kettenbach GmbH & Co. KG
Street: Im Heerfeld 7
Place: D-35713 Eschenburg
Telephone: + 49(0) 2774/705-0
e-mail: info@kettenbach.com
Internet: www.kettenbach.com
Responsible Department: R&D
Telefax: +49 (0)2774/705-66

Further Information

The product is intended for professional use.

2. Hazard(s) identification

Classification of the chemical

The particulars given in the Material Safety Data Sheet only apply to the described product in connection with its appropriate utilization. These particulars are based on the latest state of our knowledge and information. In particular, they serve the purpose of describing our product under the aspect of hazards caused by such product and pertaining safety actions. They do not constitute any guarantee of product quality and/or quality features. The particulars given in this Material Safety Data Sheet are not required in accordance to FDA regulations. This product is classified as a medical device.

Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (29 CFR § 1910.1200). They merely serve the purpose of providing sufficient information on the voluntary basis with a view to ensure the safe utilization of such substance/mixture/product.

Label elements

Hazards not otherwise classified

Formation of potentially explosive vapor/air mixtures is possible.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture based on silicone resin in organic solvents.

Hazardous components

CAS No	Components	Quantity
141-78-6	ethyl acetate	61 %

4. First-aid measures

Description of first aid measures

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General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Most important symptoms and effects, both acute and delayed

No known symptoms to date.

Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Extinguishing powder

Foam

Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water

Special protective equipment and precautions for fire-fighters

Co-ordinate fire-fighting measures to the fire surroundings.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition.

Use personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Reference to other sections

No release of hazardous substances.

Personal protection equipment (PPE): see section 8

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Keep away from sources of ignition - No smoking.

Wear personal protection equipment (refer to section 8).

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Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes.

When using do not eat, drink, smoke, sniff.

Further information on handling

Keep locked up and out of reach of children.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and store in a cool place.

Store in the original container only.

Hints on joint storage

Keep away from food and drink.

Further information on storage conditions

Please pay attention to the information on the package!

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m ³	f/cc	Category	Origin
141-78-6	Ethyl acetate	400	1400		TWA (8 h)	PEL
		400	1400		TWA (8 h)	REL

Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses.

Hand protection

Disposable gloves

Suitable material: Butyl caoutchouc (butyl rubber)

Wash hands before breaks and after work.

Skin protection

Protective clothing.

Avoid contact with skin, eyes and clothes.

Take off contaminated clothing and wash it before reuse.

Respiratory protection

Respiratory protection is not required when used properly and under normal conditions.

Provide adequate ventilation.

Environmental exposure controls

Do not allow to enter into surface water or drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	red
Odor:	ester-like
Odour threshold:	No data available

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Test method

Melting point/freezing point:	-84 °C °C	
Boiling point or initial boiling point and boiling range:	77 °C	
Flammability:	No data available	
Lower explosion limits:	2,1 vol. %	
Upper explosion limits:	11,5 vol. %	
Flash point:	-4 °C	DIN EN ISO 2719
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH-Value:	No data available	
Viscosity / kinematic:	No data available	
Water solubility:	No data available	
Solubility in other solvents		
No data available		
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	No data available	
Dispersion stability:	No data available	
Vapor pressure:	No data available	
Vapor pressure:	No data available	
Density:	No data available	
Relative density (at 20 °C):	>0,9	
Bulk density:	not applicable	
Relative vapour density:	No data available	
Particle characteristics:	not applicable	

Other information

Information with regard to physical hazard classes

Explosive properties

Formation of potentially explosive vapor/air mixtures is possible.

Sustaining combustion:

No data available

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

not applicable

10. Stability and reactivity

Reactivity

Vapors may form explosive mixtures with air.

Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

None by intended use.

Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Incompatible materials

None by intended use.

Oxidizing agent

Hazardous decomposition products

Formaldehyde

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Further information

Heating may cause a fire.

11. Toxicological information

Information on toxicological effects

Acute toxicity

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

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 mg/kg 5620	Rat		
	dermal	LD50 mg/kg >20000	Rabbit		
	inhalation	Data lacking			

Irritation and corrosivity

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

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

12. Ecological information

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

Mobility in soil

The product has not been tested.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

None known.

13. Disposal considerations

Waste treatment methods

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Disposal recommendations

Do not remove with domestic waste. Do not allow to enter drains or watercourses.
Dispose in accordance with official regulations.

Contaminated packaging

Non-contaminated packages may be recycled.

14. Transport information

U.S. DOT 49 CFR 172.101

UN number or ID number: UN 1866
Proper shipping name: RESIN SOLUTION
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Marine transport (IMDG)

UN number or ID number: UN 1866
UN proper shipping name: RESIN SOLUTION
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Special Provisions: -
Limited quantity: 5 L
Excepted quantity: E2
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1866
UN proper shipping name: RESIN SOLUTION
Transport hazard class(es): 3
Packing group: II
Hazard label: 3



Special Provisions: A3
Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No
Danger releasing substance: not applicable

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Special precautions for user

not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 304 CERCLA:

Ethyl acetate (141-78-6): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

Ethyl acetate (141-78-6): Fire hazard, Immediate (acute) health hazard

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

NFPA Hazard Ratings

Health: 1
Flammability: 3
Reactivity: 0
Unique Hazard:



Changes

Revision date: 07/31/2023
Revision No: 1,01
Date of preparation / Revised on: 31/07/2023
Version number: 1,01
Replaces version number: 1,00 (01/06/2023)

Abbreviations and acronyms

ATE: Acute toxicity estimate. CAS: Chemical abstracts service. CFR: Code of Federal Regulations. DNEL: Derived No Effect Level EC50: 50% of maximal effective concentration. FDA: Food and Drug Administration. GHS: Globally Harmonised System. IATA: International air transport association. ICAO: Technical instructions for the safe transport of dangerous goods by air. IMDG: International maritime dangerous goods. LC50: Lethal concentration to 50 % of a test population. LD50: Lethal dose to 50% of a test population (median lethal dose). NOAEL: No Observed Adverse Effect Level. PBT: Persistent, bioaccumulative and toxic substance. PEL: Permissible Exposure Limit. PNEC: Predicted No Effect Concentration. REL: Recommended exposure limit. STOT RE: Specific Target Organ Toxicity – Single Exposure. STOT SE: Specific Target Organ Toxicity – Repeated Exposure. TWA: 8-hour Time Weighted Averages (long-term exposure limit). US OSHA: US Occupational Safety and Health Administration. vPvB: Very persistent and very bioaccumulative.

Other data

Training instructions: Use only by personnel trained in dentistry.

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)