

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 1 of 10

1. Identification

Product identifier

Mucopren adhesive

Further trade names

Mucopren Adhesive
Mucopren Adhesive Fast

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

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

Uses advised against

Use by untrained dental personnel and/or unapproved areas of application.

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	Telefax: +49 (0)2774/705-66
e-mail:	info@kettenbach.com	
Internet:	www.kettenbach.com	
Responsible Department:	R&D	

Further Information

The product is intended for professional use.

2. Hazard(s) identification

Classification of the chemical

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Eye Irrit. 2; H319
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

Safety Information Sheet for Medical Devices The particulars given in the Safety Information 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 Safety Information Sheet are not required in accordance with 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

Regulation (EC) No 1272/2008

Hazard components for labelling

ethyl acetate

Signal word: Danger

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 2 of 10

Pictograms:

Hazard statements

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

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P233 Keep container tightly closed.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 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+P235 Store in a well-ventilated place. Keep cool.

Hazards not otherwise classified

Formation of potentially explosive vapor/air mixtures is possible.

3. Composition/information on ingredients
Mixtures
Chemical characterization

Polymethyl methacrylate Copolymer in ethyl acetate.

Hazardous components

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
141-78-6	ethyl acetate			90 - < 95 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
	Reaction mass of 9011-14-7 and 94-36-0			<10 %
	933-551-9			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
1330-20-7	xylene			<0,5 %
	215-535-7	601-022-00-9	01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Components	Quantity
		Specific Conc. Limits, M-factors and ATE	
141-78-6	205-500-4	ethyl acetate	90 - < 95 %
		inhalation: Data lacking (gases); dermal: LD50 = >20000 mg/kg; oral: LD50 = 5620 mg/kg	
1330-20-7	215-535-7	xylene	<0,5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg	

4. First-aid measures
Description of first aid measures

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 3 of 10

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 ingestion

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

Do NOT induce vomiting.

Give sodium sulfate as laxative (1 tablespoon in 1 glass of water).

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 spray jet

Additional information

Take precautionary measures against static discharges.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition.

Use personal protection equipment.

For non-emergency personnel

Do not allow to enter into surface water or drains.

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).

Other information

Wipe up with absorbent material (eg. cloth, fleece).

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Section 12: Ecological Information (non-mandatory)

7. Handling and storage

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 4 of 10

Precautions for safe handling

Advice on safe handling

Wear personal protection equipment (refer to section 8).
Avoid breathing vapours.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

After use replace the closing cap immediately.
Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Keep away from food and drink.

Further information on storage conditions

Please pay attention to the information on the package!

Specific end use(s)

Not applicable.

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
1330-20-7	Xylenes (o-,m-,p-isomers)	100	435		TWA (8 h)	PEL

Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection EN 166

Hand protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Recommended glove articles EN ISO 374

By short-term hand contact Suitable material:

Thickness of the glove material: 0,38mm

Breakthrough time:: -

By long-term hand contact: PE (polyethylene)

Thickness of the glove material: -

Breakthrough time:: >480 min

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 5 of 10

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.

Respiratory protection necessary at:
 Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (EN 136/140)
 Suitable material: A2, B2, E2, K2, P3

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:		
Color:		
Odour threshold:	No data available	
		Test method
Melting point/freezing point:	-84 °C	
Boiling point or initial boiling point and boiling range:	76,5 - 77,5 °C	
Flammability:	No data available	ISO 10156
Lower explosion limits:	2,1 vol. %	
Upper explosion limits:	11,5 vol. %	
Flash point:	ca. - 4 °C	DIN 51758
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH-Value:	not applicable	
Viscosity / kinematic:	No data available	
Water solubility: (at 20 °C)	ca. 85 g/L	
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	0,73	
Dispersion stability:	No data available	
Vapor pressure: (at 20 °C)	No data available	
Vapor pressure:	No data available	
Density (at 20 °C):	> 0,9 g/cm ³	
Relative density:	No data available	
Bulk density:	not applicable	
Relative vapour density: (at 20 °C)	No data available	g/cm ³
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

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 6 of 10

Gas: not applicable

Oxidizing properties

none

Other safety characteristics

Viscosity / dynamic: 0,44 mPa·s

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.

Hazardous decomposition products

No data available

11. Toxicological information

Information on toxicological effects

Acute toxicity

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

: LD50: > 5000 mg/kg Rat

ATEmix tested

	Dose	Species	Source
LD50, oral	5000 mg/kg	Rat	
LD50, dermal	18000 mg/kg	Rabbit	
LC50, inhalation (vapor)	mg/l	not applicable	

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 5620 mg/kg	Rat		
	dermal	LD50 >20000 mg/kg	Rabbit		
	inhalation	Data lacking			
1330-20-7	xylene				
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			

Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: not applicable

Sensitizing effects

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

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 7 of 10

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (ethyl acetate)

Specific target organ toxicity (STOT) - repeated exposure

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

Aspiration hazard

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

Information on other hazards

Further information

Harmful by inhalation and if swallowed.

: Vapors may cause drowsiness and dizziness.

Harmful: may cause lung damage if swallowed.

12. Ecological information

Ecotoxicity

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

CAS No	Components					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 230 mg/l	96 h	Pimephales promelas		
	Acute algae toxicity	ErC50 >100 mg/l	72 h	Desmodesmus subspicatus		

Persistence and degradability

No data available

BCF

CAS No	Components	BCF	Species	Source
141-78-6	ethyl acetate	30		

Mobility in soil

The product has not been tested.

Results of PBT and vPvB assessment

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

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

Disposal recommendations

Do not remove with domestic waste. Do not allow to enter drains or watercourses.

Dispose in accordance with official regulations.

List of Wastes Code - used product

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 8 of 10

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

14. Transport information

Land transport (ADR/RID)

UN number or ID number: UN 1173
UN proper shipping name: ETHYL ACETATE
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Classification Code: F1
 Limited quantity: 1 L
 Excepted quantity: E2
 Transport category: 2
 Hazard No: 33
 Tunnel restriction code: D/E

Inland waterways transport (ADN)

UN number or ID number: UN 1173
UN proper shipping name: ETHYL ACETATE
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Classification Code: F1
 Limited quantity: 1 L
 Excepted quantity: E2

Marine transport (IMDG)

UN number or ID number: UN 1173
UN proper shipping name: ETHYL ACETATE
Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



Special Provisions: -
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1173
UN proper shipping name: ETHYL ACETATE

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 9 of 10

Transport hazard class(es): 3
Packing group: II
 Hazard label: 3



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.

Special precautions for user

not relevant

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

Not applicable.

15. Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):
 Entry 3, Entry 40, Entry 75

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. Other information

Changes

Date of preparation / Revised on: 29/08/2023
 Version number: 3,10
 Replaces version number: 3,09 (03/03/2021)

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.

Mucopren adhesive

Revision date: 08/29/2023

Product code: Mucopren_Adhesive

Page 10 of 10

Classification for mixtures and used evaluation method according to GHS

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H336	Calculation method

Relevant H statements (full text)

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
EUH066	Repeated exposure may cause skin dryness or cracking.

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.)