

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

1.1 Product identifier

Product name: BISICO Adhesive
Trade number: 08210

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:

Dental - Tray Adhesive

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

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Johanneswerkstraße 3
D-33611 Bielefeld
Tel.: +49 521 8016800
Fax: +49 521 8016801
Email: info@Bisico.de
Responsible for the Safety Data Sheet: Sebastian Zimmermann

1.4. Emergency telephone number:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Tel.: +49 521 8016800 (08:00-17:00 PM)
Fax: +49 521 8016801
M. Wassmann

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 Hazard

categories:

Harmful to aquatic life with long lasting effects: 3
Flammable liquid: Flam. Liq. 2 Aspiration hazard: Asp. Tox. 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Reproductive toxicity: Repr. 2
Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2 Hazard Statements:
Highly flammable liquid and vapour.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Regulation (EC) No. 1272/2008 Hazard components for labelling

ethylacetate
toluene

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H361d Suspected of damaging the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P243 Take precautionary measures against static discharge.
 P201 Obtain special instructions before use.
 P273 Avoid release to the environment.
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P405 Store locked up.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P331 Do NOT induce vomiting.
 P403+P235 Store in a well-ventilated place. Keep cool.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:**Hazard statements**

H304-H361d

Precautionary statements

P280-P301+P310-P331

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
141-78-6	ethylacetate			50 - < 55 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			

108-88-3	toluene			20 - < 25 %
	203-625-9	601-021-00-3	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Medical treatment necessary.

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

No information available.

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

Further information on toxicology in section 11 must be observed. Product can work reproductive toxic (fruit damaging, or impairment of female or male reproductive function). After exposure, a specialist advice (e.g., gynecology / obstetrics or if necessary toxicology / human genetics) is recommended.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

In case of fire may be liberated: Gases/vapours, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Remove persons to safety. Evacuate area. Use personal protection equipment.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage:**7.1. Precautions for safe handling****Advice on safe handling**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Handle and open container with care. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Store in a place accessible by authorized persons only. Store in a cool dry place. Ensure adequate ventilation of the storage area.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Strong acid, Strong alkali.

Further information on storage conditions

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect against direct sunlight.

7.3. Specific end use(s)

Adhesives, sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type	Exposure route		Effect	Value
141-78-6	ethylacetate			
Consumer DNEL, long-term	oral		systemic	4,5 mg/kg bw/day
Worker DNEL, long-term	dermal		systemic	63 mg/kg bw/day
Consumer DNEL, long-term	dermal		systemic	37 mg/kg bw/day
Worker DNEL, long-term	inhalation		systemic	734 mg/m ³
Worker DNEL, long-term	inhalation		local	734 mg/m ³
Worker DNEL, acute	inhalation		systemic	1468 mg/m ³
Worker DNEL, acute	inhalation		local	1468 mg/m ³
Consumer DNEL, long-term	inhalation		systemic	367 mg/m ³
Consumer DNEL, long-term	inhalation		local	367 mg/m ³
Consumer DNEL, acute	inhalation		systemic	734 mg/m ³
Consumer DNEL, acute	inhalation		local	734 mg/m ³

PNEC values

CAS No	Substance	
Environmental compartment	Value	
141-78-6	ethylacetate	
Freshwater	0,24 mg/l	
Freshwater (intermittent releases)	1,65 mg/l	
Marine water	0,024 mg/l	
Marine water (intermittent releases)	1,65 mg/l	

Freshwater sediment	1,15 mg/kg
Marine sediment	0,115 mg/kg
Micro-organisms in sewage treatment plants (STP)	650 mg/l
Soil	0,148 mg/kg

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Tested protective gloves must be worn

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing. Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

If an inhalation exposure above the workstation limit cannot be excluded, suitable respiratory protection equipment must be used. Suitable breathing apparatus: Respiratory protection device with full mask, correspondingly recognized standards such as EN 136.

Recommended filter type: Gas filter ABEK (certain inorganic, organic and acidic gases and vapors; Ammonia / amines), correspondingly recognized standards such as EN 14387

Environmental exposure controls

Avoid release to the environment. Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless
Odour:	fruity
pH-Value:	neutral

Changes in the physical state

Melting point: - 68 °C
Initial boiling point
and boiling range: 87 °C
Flash point: 1 °C

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

The product is not: Explosive.
Vapours can form explosive mixtures with air.
Lower explosion limits: 1,4 vol. %
Upper explosion limits: 9,0 vol. %
Ignition temperature: 480 °C

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidising.
Vapour pressure: 85 hPa
(at 20 °C) Density: 0,95 g/cm³
Water solubility: practically insoluble

Solubility in other solvents

not determined
Partition coefficient: not determined
Viscosity / dynamic: 30000 mPa·s (at 20 °C)
Viscosity / kinematic: not determined
Vapour density: not determined
Evaporation rate: not determined

9.2. Other information

Odour threshold: not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect against direct sunlight.

10.5. Incompatible materials

Oxidizing agent. Pyrophoric or self-heating substances. Strong acid, Strong alkali.

10.6. Hazardous decomposition products

In case of fire may be liberated: Gases/vapours, toxic

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 5620 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 18000 mg/kg	Rabbit	Manufacturer	
	inhalation (4 h) vapour	LC50 56 mg/l	Rat	Manufacturer	
108-88-3	toluene				
	oral	LD50 5580 mg/kg	Rat	Manufacturer	
	dermal	LD50 12400 mg/kg	Rabbit	Manufacturer GESTIS	
	inhalation (4 h) vapour	LC50 28,1 mg/l	Rat	Manufacturer GESTIS	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (toluene)

Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity:

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

STOT-single exposure

May cause drowsiness or dizziness. (ethyl acetate; toluene)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (toluene)

Aspiration hazard

May be fatal if swallowed and enters airways.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information
12.1. Toxicity

The product is not: Ecotoxic.

The product is not Ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
141-78-6	ethyl acetate						
	Acute fish toxicity	LC50	230 mg/l	96 h	Pimephales promelas (fathead minnow)	Manufacturer	
	Acute crustacea toxicity	EC50	610 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Algea toxicity	NOEC	> 100 mg/l	3 d	Desmodesmus subspicatus	Manufacturer	OECD 201
	Crustacea toxicity	NOEC	2,4 mg/l	21 d	Daphnia magna (Big water flea)	Manufacturer	DIN 38412 / part 11

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
141-78-6	ethyl acetate	0,68

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethyl acetate, toluene)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 274 601 640D
 Limited quantity: 1 L
 Excepted quantity: E2
 Transport category: 2
 Hazard No: 33
 Tunnel restriction code: D/E

Inland waterways transport (ADN) 14.1. UN number:

UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethyl acetate, toluene)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 274 601 640D
 Limited quantity: 1 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethyl acetate, toluene)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Special Provisions: 274
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR) 14.1. UN number:

UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (ethyl acetate, toluene)

14.3. Transport hazard class(es): 3
14.4. 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
14.5. Environmental hazards L

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
 not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: ethyl acetate; toluene

Entry 40: ethyl acetate; toluene

Entry 48: toluene

2010/75/EU (VOC): < 80 %

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

The information is based on the current state of knowledge and experience. The Information in the safety data sheet does not have the meaning of property assurances.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate NOEC:
No Observed Effect Concentration
BCF: Bio-concentration factor PBT: persistent,
bioaccumulative, toxic vPvB: very persistent,
very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

[CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Repr. 2; H361d	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 2; H373	Calculation method
Repr. 2; H361f	Reproductive toxicity category 2; May probably affect fertility.
Flam. Liq. 3; H226	Flammable liquids Category 3; Flammable liquid and steam.
Aquatic Chronic 1; H410	Long-term (chronic) water-endangered category 1; Very toxic to aquatic life with long lasting effects.

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Contact Person:

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