

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 1 of 8

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

1.1. Product identifier

Panasil Adhesive

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

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

1.3. 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)2774/705-87
e-mail:	info@kettenbach.de	
Contact person:	Regulatory Affairs Manager	Telephone: +49 (0)2774/705-0
Internet:	www.kettenbach.de	
Responsible Department:	Regulatory Affairs	

1.4. Emergency telephone number:

+49 (0)30 30686790 (English/German)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: Xn - Harmful, Xi - Irritant
R phrases:
Highly flammable.
Harmful by inhalation.
Irritating to eyes.
Repeated exposure may cause skin dryness or cracking.

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

Hazard categories:
Flammable liquid: Flam. Liq. 3
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye damage.
Causes skin irritation.

2.2. Label elements

Hazardous components which must be listed on the label

butyl titanate (IV)

Signal word: Danger

Pictograms: GHS02-GHS05



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 2 of 8

Hazard statements

- H225 Highly flammable liquid and vapour.
H318 Causes serious eye damage.
H315 Causes skin irritation.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container to Refer to any Community provisions relating to waste..

2.3. Other hazards

No risks worthy of mention.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation based on silicone resin in organic solvents.

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
205-500-4	ethyl acetate	45 - < 50 %
141-78-6	F - Highly flammable, Xi - Irritant R11-36-66-67	
607-022-00-5	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
215-535-7	xylene	5 - < 10 %
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315	
202-849-4	ethylbenzene	1 - < 5 %
100-41-4	F - Highly flammable, Xn - Harmful R11-20-48/20-65	
601-023-00-4	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304	
227-006-8	butyl titanate (IV)	1 - < 5 %
5593-70-4	Xi - Irritant R10-38-41	
	Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1; H226 H315 H318	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. Seek medical attention if problems persist.

After contact with skin

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 3 of 8

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Vomiting. Call a physician immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂).
Sand.
Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition.
Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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).

6.4. Reference to other sections

No release of hazardous substances.
Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep away from sources of ignition. - No smoking.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Further information on handling

No special precautionary measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool place.
Store only in original container.

Further information on storage conditions

Protect against: heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 4 of 8

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
100-41-4	Ethylbenzene	100	441	-	TWA (8 h)	WEL
		125	552	-	STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220	-	TWA (8 h)	WEL
		100	441	-	STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

8.2. Exposure controls

Protective and hygiene measures

Avoid contact with skin, eyes and clothes. Change contaminated clothing. Wash hands before breaks and after work. Protect skin by using skin protective cream.

Eye/face protection

Framed glasses.

Hand protection

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.

Hand protection: Suitable material: Butyl rubber.

Skin protection

Wear suitable protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	blue
Odour:	characteristic

Test method

Changes in the physical state

Initial boiling point and boiling range:	>70 °C
Flash point:	3 °C
Lower explosion limits:	2,1 vol. %
Upper explosion limits:	11,5 vol. %
Ignition temperature:	> 400 °C
Vapour pressure: (at 20 °C)	< 102 hPa
Density (at 20 °C):	<1,1 g/cm ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 5 of 8

Water solubility:
(at 20 °C) practically insoluble

9.2. Other information

Formation of potentially explosive vapor/air mixtures is possible.

SECTION 10: Stability and reactivity

10.4. Conditions to avoid

None by intended use.

10.5. Incompatible materials

none

10.6. Hazardous decomposition products

none

Further information

Highly flammable. Vapours may form explosive mixtures with air.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Irritant effect on the skin: Not an irritant.

Irritant effect on the eye: Irritant.

Respiratory or skin sensitisation: no danger of sensitization.

ATEmix tested

LD50, oral	Dose	Species	Source
	>10000 mg/kg	Rat	

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
1330-20-7	xylene	dermal	ATE	1100 mg/kg		
		inhalative vapour	ATE	11 mg/l		
		inhalative aerosol	ATE	1,5 mg/l		
100-41-4	ethylbenzene	oral	LD50	3500 mg/kg	Rat	GESTIS
		dermal	LD50	15400 mg/kg	Rabbit	GESTIS
		inhalative (4 h) vapour	LC50	17,2 mg/l	Rat	
		inhalative aerosol	ATE	1,5 mg/l		

Additional information on tests

Preparation not tested. No data available.

Further information

Harmful by inhalation and if swallowed.

Hazards identification: Nausea. Headache. Vapours may cause drowsiness and dizziness.

After skin contact: Has de-greasing effect on the skin.

Following eye contact: Irritant.

Harmful: may cause lung damage if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 6 of 8

CAS No	Chemical name	Method	Dose	[h] [d]	Species	Source
100-41-4	ethylbenzene					
	Acute algae toxicity	ErC50	3,6 mg/l	96 h		GESTIS

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
100-41-4	ethylbenzene	3,15

Further information

Leakage into the environment must be prevented.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not remove with domestic waste. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing dangerous substances
Classified as hazardous waste.

Waste disposal number of used product

200399 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; other municipal wastes; municipal wastes not otherwise specified

Contaminated packaging

Cleaned containers may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1866
14.2. UN proper shipping name: Resin solution
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 640D
 Excepted quantity: E2
 Transport category: 2
 Hazard No: 33

Inland waterways transport (ADN)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 7 of 8

14.1. UN number: UN 1866
14.2. UN proper shipping name: Resin solution
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Classification code: F1
 Special Provisions: 640C
 Limited quantity: 5 L
 Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1866
14.2. UN proper shipping name: Resin solution
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



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

Air transport (ICAO)

14.1. UN number: UN 1866
14.2. UN proper shipping name: Resin solution
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 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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

not applicable

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Panasil Adhesive

Print date: 21.07.2015

Product code: 001414

Page 8 of 8

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information

Relevant R-phrases (Number and full text)

- | | |
|-------|---|
| 10 | Flammable. |
| 11 | Highly flammable. |
| 20 | Harmful by inhalation. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 36 | Irritating to eyes. |
| 38 | Irritating to skin. |
| 41 | Risk of serious damage to eyes. |
| 48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |

Relevant H- and EUH-phrases (Number and full text)

- | | |
|--------|--|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| 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.

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