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According to 1907/2006/EG, Article 31

Revision: 11.11.2015 Version number 4 Printing date: 16.10.2018

#### **HinriPress Bonding**

#### 1. Identification of the Substance / Preparation and Company:

1.1 Product identifier

Commercial product name: HinriPress Bonding

1.2 Relevant identified uses of the substance No further information available.

or mixture and uses advised against:

Application of the substance / the mixture: Dental bonding material

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: ERNST HINRICHS Dental GmbH

 Street / mailbox:
 Borsigstr. 1

 Country code. / postal code / city:
 D - 38644 Goslar

 Phone:
 0 53 21 / 5 06 24

 Fax:
 0 53 21 / 5 08 81

E-mail / Website: info@hinrichs-dental.de / www.hinrichs-dental.de

Further information obtainable from: ERNST HINRICHS Dental GmbH

1.4 Emergency telephone number

ERNST HINRICHS Dental GmbH: +49 (0) 53 21 / 5 06 24 - 25 (Mon-Fri. 8 a.m. – 4 p.m.)

#### 2. Hazards identification:

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319
Skin Sens. 1 H317
STOT SE 3 H335
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

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

2.2 Label Elements:

Labelling according to Regulation (EC) No The product is classified and labelled according to the CLP 1272/2008:

Hazard pictograms.





GHS02 GHS07

Signal word: Danger

Hazard-determining components of labelling:

methyl methacrylate

butanone

Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

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P303+P361+P353 | IF ON SKIN (or hair): Remove/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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national / international

regulations.

2.3 Other hazards

> Results of PBT and vPvB assessment: PBT: Not applicable

vPvB: Not applicable

Composition/ information on ingredients:

3.1 Chemical characterisation: Mixtures

> Mixture of substances listed below with non-hazardous additions. Description:

3.3 Dangerous components:

CAS:78-93-3 butanone EINECS: 201-159-0

Eye Irrit. 2, H319; STOT SE 3, H336

CAS: 80-62-6

EINECS: 201-297-1

methyl methacrylate

25-50 %

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25-50 %



H317; STOT SE 3, H335

Skin Irrit. 2, H315; Skin Sens. 1,

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

#### First aid measures:

Description of first aid measures

4.1 General Information Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position

for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

Rinse opened eye for several minutes under running water. After eye contact:

Then consult a doctor.

Do not induce vomiting. After swallowing:

Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache Drowsiness Dizziness

Irritant to skin and eyes

Sensitization possible through skin contact

4.3 Indication of any immediate medical

attention and special treatment needed:

No further relevant information available.

#### Firefighting measures:

5.1 Extinguishing media

Suitable extinguishing agents: CO2, sand extinguishing powder. Do not use water.

For safety reasons unsuitable Water.

extinguishing agents: Water with full jet.

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5.2 Special hazards arising from the No further relevant information available.

substance or mixture: Advice for fire-fighters:

5.3 Protective equipment: Wear self-contained respiratory protective device.

Accidental release measures:

Personal precautions, protective Avoid contact with skin and eyes. Keep away from ignition equipment and emergency procedures sources. Wear protective equipment. Keep unprotected persons

away.

6.2 **Environmental precautions:** Prevent seepage into sewage system, work pits and cellars. Do

not allow to enter sewers/ surface or ground water.

6.3 Absorb with liquid-binding material (sand, diatomite, acid binders, Methods and material for containment and

cleaning up:

universal binders, sawdust). Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

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 disposal information.

Handling and storage:

Precautions for safe handling: Avoid contact with skin and eyes.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion

protection:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

7.2 Storage:

7.3

Requirements to be met by storerooms

and receptacles:

Store between 15 °C and 30 °C at a well ventilated place. Protect

from heat and direct sunlight.

Information about storage in one common

storage facility:

Further information about storage

conditions:

Not required.

Store in cool, dry conditions in well, sealed receptacles.

No further relevant information available.

**Exposure controls/personal protection:** 8.

Additional information about design of

technical facilities:

No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

78-93-3 butanone

Specific end use(s)

Short-term value: 899 mg/m<sup>3</sup>, 300 ppm WEL

Long-term value: 600 mg/m<sup>3</sup>, 200 ppm

Sk, BMGV

80-62-6 methyl methacrylate

Short-term value: 416 mg/m³, 100 ppm WEL

Long-term value: 208 mg/m³, 50 ppm

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

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General protective and hygienic

measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter

device. In case of intensive or longer exposure use self-contained

respiratory protective device.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the

Preparation.

Protective gloves should be changed regularly, especially after intensive contact with the product.

For every workplace a suitable type of protective gloves must be selected.

Material of gloves:

Butyl rubber (0,7 mm) EN 374

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. As the product is a preparation of Several, substances, the resistance of the glove material can't be calculated in advance and has therefore to be checked prior to

the application.

As there are many different conditions in every day work these indications can only serve as an aid to orientation for the

selection of suitable gloves for the handling of chemical products. By no means can they replace qualifying examinations by the

end-user.

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. The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the

penetration time, is recommended.

Eye protection:

Tightly sealed goggles

Body protection: Protective work clothing.

9. Physical and chemical properties:

9.1 Appearance:

Form: Fluid
Colour: Colourless
Odour: Characteristic.
Odour threshold: Not determined.
pH-value: Not determined.

9.2 Change in condition:

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 79°C
Flash point: - 4°C
Ignition temperature: 430°C

Decomposition temperature: Not determined.

Self-igniting: Product is not self-igniting.

Danger of explosion: Product is not explosive. However, formation of explosive air /

formation of vapour mixtures are possible.

**Explosion limits:** 

Lower: 1,8 Vol %
Upper: 12,5 Vol %
Oxidising properties. Not determined.

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Vapour pressure at 20°C: 105 hPa. Density at 20°C: 0,89 g/cm<sup>3</sup> Relative density: Not determined. Vapour density: Not determined. Evaporation rate: Not determined.

Solubility in / Miscibility with water: Not miscible or difficult to mix.

Segregation coefficient (n-octanol /water): Not determined.

Viscosity:

Dvnamic: Not determined. Kinematic: Not determined.

9.3 Other information: No further relevant information available.

Stability and reactivity:

10.1 Reactivity: No dangerous reactions if used according to specifications.

Chemical stability: Stable if used according to specifications.

Thermal decomposition / conditions to be No decomposition if used according to specifications.

Protect from heat and direct sunlight. avoided:

10.2 Possibility of hazardous reactions: Reacts with oxidizing agents.

Exothermic polymerisation.

10.3 Conditions to avoid: No further relevant information available. 10.4 Incompatible materials: No further relevant information available.

10.5 Hazardous decomposition products: No dangerous decomposition products known.

**Toxicological information:** 

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification: Methylmethacrylat (MMA): LD-50 oral > 5000 mg/kg rat (Lit.)

LC-50 inhalative 7093 ppm/4h rat (Lit.)

alip. Urethanacrylat: LD-50 oral > 2000 mg/kg rat

11.2 Primary irritant effect:

Skin corrosion/irritation: Irritant to skin and mucous membranes.

Serious eye damage/irritation: Irritating effect.

Respiratory or skin sensitisation: Sensitisation possible through skin contact.

Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines

for Preparations as issued in the latest version: Irritant

12. Ecological information:

12.1 Toxicity

Aquatic toxicity: Fish Toxicity (MMA):

LC-50 > 79 mg/l OECD 203 NOEC: 40 mg/l ISO 7346 Exposure: 96 h EEC84 Species: 449 V, C1

Oncorhynchus mykiss Bacterial Toxicity: ECO: 100 mg/l Species of cells: Pseudomonas putida.

No further relevant information available. 12.2 Persistence and degradability: 12.3 Bioaccumulative potential: No further relevant information available. 12.4 Mobility in soil: No further relevant information available.

12.5 Additional ecological information:

General notes: Do not allow undiluted product or large quantities of it to reach

ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

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vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13. Disposal considerations:

13.1 Waste treatment methods:

Recommendation: Disposal must be made according to official regulations.

Must not be disposed together with household garbage. Do not

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allow product to reach sewage system.

European waste catalogue: 070104

13.2 Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

14. Transport information:

14.1 UN-Number
ADR, IMDG, IATA UN1993

14.2 UN proper shipping name
ADR ENTZÜNDBARER FLÜSSIGER STOFF, N.A.G (Dampfdruck bei

50°C höchstens 110 kPa) (ETHYLMETHYLKETON

(METHYETHYLKETON), METHYLMETHACRYLAT, MONOMER,

STABILISIERT)

IMDG, IATA FLAMMABLE LIQUID, N.O.S: (ETHYL METHYL KETONE

(METHYL ETHYL KETONE), METHYL METHACRYLATE

MONOMER, STABALIZED)

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class 3 Flammable liquids.

Label

14.4 Packing group

ADR, IMDG, IATA

14.5 Environmental hazards:

Marine pollutant: No

Special precautions for user Warning: Flammable liquids. Danger code (Kemler): 33

EMS Number: F-E,S-E

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

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ):

Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

Transport category: 2

Tunnel restriction code:

D/E

IMDG

Limited quantities (LQ): 1L

Excepted quantities (EQ): Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

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14.7 UN "Model Regulation"

UN1993, FLAMMABLE LIQUID, N.O.S (vapour pressure at 50°C not more than 110 kPa) (ETHYL METHYL KETONE (METHYL ETHYL KETONE), METHYL METHACRYLATE MONOMER, STABALIZED)

## 15. Regulatory information:

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

Directive 2012/18/EU

Named dangerous substances - Annex : None of the ingredients is listed.

Seveso category: P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating

women must be observed.

Technical instructions (air): Class Share in %

NK 25-50

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1 Relevant phrases:

IMDG:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.

16.2 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 Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European

Agreement concerning the

International Carriage of Dangerous Goods by Road)
International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: 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 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3