

Printing date 28.02.2012

| 1 Identification of the substance/mixture and of the company/undertaking | |
|--|---|
| · Product identifier | |
| Trade name: <u>PANAVIA F 2.0 ; ED PRIMER Liquid A</u> | |
| Article number: 070-A Registration number Not applicable Application of the substance / the preparation Dental material for tooth surface conditioning | |
| Details of the supplier of the safety data sheet | |
| · Manufacturer: Kuraray Europe GmbH | |
| Philipp-Reis-Str. 4, | |
| 65795 Hattersheim am Main | |
| Germany Phone:+49 (0)69 305 35 840 | |
| Fax:+49 (0)69 305 35 640 | |
| E-mail: dental@kuraray.de | |
| - Supplier: J & S Davis | |
| 7"Y j ky qtý 'Tqcf."Ugxgpci g. | |
| Jgtxhqtfujk."UI 3'6SU | |
| I tgcv'Dtkclp Vgr 66/'*2+'365: '969566 | |
| Hcz<- 66/"*2+365: '97: ; 2; | |
| G∕o ckn≮luf ucrguB lu/f cxku0eq0wm " | |
| • Further information obtainable from: Manufacturer or Supplier | |
| · Emergency telephone number: | |
| National Poisons information Service (London Centre) Guy's & St. Thomas' Hospital Trust | |
| Medical Toxicology Unit | |
| Avonley Road | |
| LONDON SE14 5ER | |
| Emergency telephone: (local) 0870 600 6266 or +44 20 7771 5394 | |
| Administrative telephone: +44 20 7 771 53 10 Facsimile number: +44 20 7 771 53 09 | |
| Facsimile number: +44 20 7 7/1 53 09 | |
| 2 Hazards identification | |
| · Classification of the substance or mixture | |
| Classification according to Regulation (EC) No 1272/2008 | |
| GHS07 | |
| | |
| Skin Irrit. 2 H315 Causes skin irritation. | |
| Eye Irrit. 2 H319 Causes serious eye irritation. | |
| Skin Sens. 1 H317 May cause an allergic skin reaction. | |
| Classification according to Directive 67/548/EEC or Directive 1999/45/EC | |
| Xi; Irritant | |
| R36/38: Irritating to eyes and skin. | |
| Xi; Sensitising | |
| R43: May cause sensitisation by skin contact. | |
| Information concerning particular hazards for human and environment: | |
| The product has to be labelled due to the calculation procedure of the "General Classification guideline fo preparations of the EU" in the latest valid version. | r |

Safety data sheet according to 1907/2006/EC, Article 31

(Contd. on page 2)



Printing date 28.02.2012

Revision: 01.04.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

| | (Contd. of page 1) |
|--------------|--|
| Classificati | |
| data. | cation is according to the latest editions of the EU-lists, and extended by company and literature |
| Label elem | ents |
| Labelling a | ccording to Regulation (EC) No 1272/2008 |
| The product | t is classified and labelled according to the CLP regulation. |
| Hazard pic | tograms GHS07 |
| Signal wor | d Warning |
| Hazard-det | termining components of labelling: |
| | thyl methacrylate |
| Hazard sta | |
| H315 Cause | es skin irritation. |
| H319 Cause | es serious eye irritation. |
| H317 May | cause an allergic skin reaction. |
| Precaution | ary statements |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| 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. |
| P321 | Specific treatment (see on this label). |
| P362 | Take off contaminated clothing and wash before reuse. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international |
| | regulations. |
| Other haza | |
| | PBT and vPvB assessment |
| PBT: Not a | pplicable. |
| vPvB: Not | applicable |

Safety data sheet according to 1907/2006/EC, Article 31

• vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

| CAS: 868-77-9 | 2-hydroxyethyl methacrylate |
|-------------------|---|
| EINECS: 212-782-2 | 🗙 Xi R36/38; 🗙 Xi R43 |
| | Skin Irrit 2 H315 Eve Irrit 2 H319 Skin Sens 1 H317 |

Other ingredients:

10-Methacryloyloxydecyl dihydrogen phosphate N-Methacryloyl-5-aminosalicylic acid Water Accelerators

4 First aid measures

· Description of first aid measures

· 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.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing:
- Do not induce vomiting; call for medical help immediately.
- If symptoms persist consult doctor.

(Contd. on page 3)

30-50%

⁻ GI



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.02.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

(Contd. of page 2)

Revision: 01.04.2012

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment:
- Wear self-contained respiratory protective device.
- Wear fully protective suit.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

- **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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- · Information about fire and explosion protection: No special measures required.

· Conditions for safe storage, including any incompatibilities

- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a refrigerator (2-8°C).
- Information about storage in one common storage facility:
- Store away from oxidizing agents.
- Store away from reducing agents.
- Further information about storage conditions:
- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Protect from heat and direct sunlight.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 4)

GB -



Printing date 28.02.2012

Safety data sheet according to 1907/2006/EC, Article 31

Revision: 01.04.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

(Contd. of page 3)

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists valid during the making were used as basis.

· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

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. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

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 not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

| Information | on basic physical | and chemical | properties |
|---------------------------------|-------------------|--------------|------------|
| | | | |

· General Information

| Appearance: Form: Colour: Odour: | Liquid Transparent Odourless | |
|---|--|--------------------|
| · pH-value: | Not applicable | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | -12 °C (2-hydroxyethyl methacrylate) 205 °C (2-hydroxyethyl methacrylate) | |
| · Flash point: | 97 °C (2-hydroxyethyl methacrylate) | |
| | | (Contd. on page 5) |



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.02.2012

Revision: 01.04.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

| | | (Contd. of page 4) |
|--|---|--------------------|
| Ignition temperature: | Not applicable | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| • Explosion limits: | | |
| Lower: | Not applicable | |
| Upper: | Not applicable | |
| · Vapour pressure: | Not applicable | |
| · Density: | 1.1 g/cm ³ | |
| Vapour density | Not applicable | |
| Solubility in / Miscibility with | | |
| water: | Partly miscible. | |
| · Segregation coefficient (n-octanol/water): | Not applicable | |
| Other information | No further relevant information available. | |

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- \cdot Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values relevant for classification:

868-77-9 2-hydroxyethyl methacrylate

Oral LD50 4680 mg/kg (guinea pig)

- 3275 mg/kg (mouse)
- 5050 mg/kg (rat)
- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- \cdot Sensitization: Sensitization 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

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.

(Contd. on page 6)



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.02.2012

Revision: 01.04.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

(Contd. of page 5)

- \cdot Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
- 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.
- **vPvB:** Not applicable.
- \cdot Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

| Void |
|-------------------------------|
| Void |
| |
| Void |
| Void |
| No |
| Not applicable. |
| o f Not applicable. |
| - |
| |

15 Regulatory information

· 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.

· Version: 5

· Relevant phrases

Not applicable

(Contd. on page 7)



Safety data sheet according to 1907/2006/EC, Article 31

Printing date 28.02.2012

Revision: 01.04.2012

Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

| | (Contd. of page 6) |
|--|--------------------|
| H315 Causes skin irritation. | |
| H317 May cause an allergic skin reaction. | |
| H319 Causes serious eye irritation. | |
| R36/38 Irritating to eyes and skin.R43 May cause sensitisation by skin contact. | CB- |