

Printing date 05.10.2016 Version number 5 Revision: 05.10.2016

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

· 1.1 Product identifier

Trade name: PANAVIA F 2.0; PASTE A

· Article number: 089-PA

· Registration number Not applicable

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 Resin-based dental adhesive cement

· 1.3 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

5 Whitworth Road, Stevenage,

Hertfordshir, SG1 4QS

Great Britain

Tel: +44- (0) 1438 747344 Fax: +44- (0)1438 758909 E-mail: jsdsales@js-davis.co.uk

· Further information obtainable from: Manufacturer or Supplier

· 1.4 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

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 2.3 Other hazards Not applicable
- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.



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Trade name: PANAVIA F 2.0; PASTE A

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SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

Dangerous components: Void

Other ingredients:

10-Methacryloyloxydecyl dihydrogen phosphate

Hydrophobic aromatic dimethacrylate

Hydrophobic aliphatic dimethacrylate

Hydrophilic aliphatic dimethacrylate

Silanated silica filler

Silanated colloidal silica

dl-Camphorquinone

Catalysts

Initiators

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** See Section 8.
- **6.2 Environmental precautions:** No special measures required.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- **6.4 Reference to other sections** No dangerous substances are released.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special measures required.
- **Information about fire and explosion protection:** No special measures required.
- 7.2 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: Not required.

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Trade name: PANAVIA F 2.0; PASTE A

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Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 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:

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.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not required.
- · Protection of hands:

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: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties General Information				
· Appearance:				
Form:	Pasty			
Colour:	Coloured			
· Odour:	Odourless			
· pH-value:	Not determined			
· Change in condition				
Melting point/Melting range:	Not determined			
Boiling point/Boiling range:	Not determined			
· Flash point:	Not determined			
· Ignition temperature:	Not determined			
· Decomposition temperature:	Not determined			

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Trade name: PANAVIA F 2.0; PASTE A

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Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined	
Upper:	Not determined	
Oxidising properties	Not determined	
· Vapour pressure:	Not determined	
Density: 2.2 g/cm ³		
Relative density	Not determined	
· Vapour density	Not determined	
Evaporation rate	Not determined	
· Solubility in / Miscibility with		
water:	Insoluble.	
Partition coefficient (n-octanol/water): Not applicable		
Viscosity: Not determined		
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.

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- Additional ecological information:
- · General notes: Generally not hazardous for water
- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Smaller quantities can be disposed of with household waste.
- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14.	Transport information
· 14.1 UN-Number	

· 14.1 UN-Number	
· ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
· ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
· ADR, IMDG, IATA	Void
14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex I	I 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

Void

· National regulations:

· UN "Model Regulation":

- Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

* Data compared to the previous version altered.



Printing date 31.08.2016 Version number 5 Revision: 29.08.2016

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

· 1.1 Product identifier

Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

· Article number: 089-PB

· Registration number Not applicable

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 Resin-based dental adhesive cement

· 1.3 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

5 Whitworth Road, Stevenage,

Hertfordshir, SG1 4QS

Great Britain

Tel: +44- (0) 1438 747344 Fax: +44- (0)1438 758909 E-mail: jsdsales@js-davis.co.uk

· Further information obtainable from: Manufacturer or Supplier

1.4 Emergency telephone number:

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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

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Acute Tox. 4 H302 Harmful if swallowed.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- Hazard pictograms GHS07
- · Signal word Warning
- Hazard-determining components of labelling:

sodium fluoride

· Hazard statements

H302 Harmful if swallowed.

· Precautionary statements

P264 Wash thoroughly after handling.

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

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P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

regulations.

· Additional Information

EUH032 Contact with acids liberates very toxic gas.

- · Labelling of packages where the contents do not exceed 125 ml
- · Hazard-determining components of labelling: sodium fluoride
- 2.3 Other hazards Not applicable
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances None
- 3.2 Chemical characterisation: Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.
- Dangerous components:

CAS: 7681-49-4 sodium fluoride

<10%

EINECS: 231-667-8 Acute Tox. 3, H301; Skin Irrit. 2, H315; Eye Irrit. 2, H319

Other ingredients:

Hydrophobic aromatic dimethacrylate

Hydrophobic aliphatic dimethacrylate

Hydrophilic aliphatic dimethacrylate

Silanated barium glass filler

Catalysts

Accelerators

Pigments

Additional information: EUH032: Contact with acids liberates very toxic gas. (sodium fluoride)

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

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- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- **5.3** Advice for firefighters
- · Protective equipment:

Mouth respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

 \cdot 6.1 Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

· 6.4 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.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Prevent formation of dust.
- · Information about fire and explosion protection: No special measures required.
- 7.2 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:

Do not store together with acids.

Store away from oxidising 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.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 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:

7681-49-4 sodium fluoride

WEL Long-term value: 2.5 mg/m³

- **Additional information:** The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- · 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 skin.

Avoid contact with the eyes.

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

(Contd. of page 3)

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:

Neoprene 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.

Eve protection: Safety glasses

SECTION 9: Physica	l and c	chemical	properties
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9.1 Information on basic physical	and chemical properties
General Information	
Appearance:	
Form:	Pasty

Colour: Coloured · Odour: Odourless Odour threshold: Not determined

· Important information on protection of health and environment, and on safety. Not determined

Not determined · pH-value: · Change in condition

Melting point/Melting range: 1012 °C (sodium fluoride) Boiling point/Boiling range: 1704 °C (sodium fluoride)

Not determined · Flash point:

Flammability (solid, gaseous): Not determined Ignition temperature: Not determined

Not determined **Decomposition temperature:**

· Self-igniting: Not determined Danger of explosion: Product does not present an explosion hazard.

Not determined

Explosion limits: Lower: Not determined

Upper: Not determined · Oxidising properties Not determined

· Vapour pressure: Density: 2.0 g/cm3

· Relative density Not determined · Vapour density Not determined

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

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Evaporation rate	Not determined	
Solubility in / Miscibility with		
water:	Insoluble.	
Partition coefficient (n-octanol/water):	Not determined	
Viscosity:	Not determined	
Dynamic:	Not determined	
Kinematic:	Not determined	
Solvent separation test:	Not determined	
Water:	Not determined	
· VOC (EC)	Not determined	
Solids content:	Not determined	
9.2 Other information	Not determined	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity

Harmful if swallowed.

· LD/LC50	values	relevant	for	classification:
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7681-49-4 sodium fluoride

Oral LD50 44 mg/kg (mouse) 52 mg/kg (rat)

- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

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- 12.4 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.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 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.

SECTION 14: Transport informa	ntion	
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Ann Marpol and the IBC Code	nex II of Not applicable.	
UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

H301 Toxic if swallowed.

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Trade name: PANAVIA F 2.0; PASTE B (TC, White, Light, Opaque)

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Abbreviations and acronyms:

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

WEL: Workplace Exposure Limit

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent STOT: Specific target organ toxicity

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IBC: International Bulk Chemical

Acute Tox. 3: Acute toxicity – Category 3 Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

* Data compared to the previous version altered.



Printing date 02.09.2016 Version number 6 Revision: 02.09.2016

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

· 1.1 Product identifier

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

· Article number: 070-A

· Registration number Not applicable

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 material for tooth surface conditioning

· 1.3 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

5 Whitworth Road, Stevenage,

Hertfordshir, SG1 4QS

Great Britain

Tel: +44- (0) 1438 747344 Fax: +44- (0)1438 758909 E-mail: jsdsales@js-davis.co.uk

· Further information obtainable from: Manufacturer or Supplier

· 1.4 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

SECTION 2: Hazards identification

- · 2.1 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.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS07
- Signal word Warning
- · Hazard-determining components of labelling:

2-hydroxyethyl methacrylate

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

(Contd. of page 1)

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Precautionary 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).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

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.

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances None
- 3.2 Chemical characterisation: Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.
- · Dangerous components:

CAS: 868-77-9 2-hydroxyethyl methacrylate 30-50% EINECS: 212-782-2 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317

· Other ingredients:

10-Methacryloyloxydecyl dihydrogen phosphate

N-Methacryloyl-5-aminosalicylic acid

Water

Accelerators

SECTION 4: First aid measures

- 4.1 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.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

GB



Printing date 02.09.2016 Version number 6 Revision: 02.09.2016

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

(Contd. of page 2)

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

· 6.4 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.

SECTION 7: Handling and storage

· 7.1 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.
- · 7.2 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 oxidising 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.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 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:

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.

(Contd. on page 4)



Printing date 02.09.2016 Version number 6 Revision: 02.09.2016

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

(Contd. of page 3)

- · 8.2 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

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information
- Appearance:

Liquid Form: Colour: Transparent · Odour: Odourless

Not determined · pH-value: · Change in condition Melting point/Melting range: -12 °C (2-hydroxyethyl methacrylate) **Boiling point/Boiling range:** 205 °C (2-hydroxyethyl methacrylate) 97 °C (2-hydroxyethyl methacrylate) · Flash point: Ignition temperature: Not determined **Decomposition temperature:** Not determined Danger of explosion: Product does not present an explosion hazard.

(Contd. on page 5)



Printing date 02.09.2016 Version number 6 Revision: 02.09.2016

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

		(Contd. of page
· Explosion limits:		
Lower:	Not determined	
Upper:	Not determined	
· Oxidising properties	Not determined	
· Vapour pressure:	Not determined	
· Density:	1.1 g/cm ³	
Relative density	Not determined	
· Vapour density	Not determined	
Evaporation rate	Not determined	
· Solubility in / Miscibility with		
water:	Partly miscible.	
· Partition coefficient (n-octanol/	water): Not determined	
· Viscosity:	Not determined	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification
868-77-9 2-hydroxyethyl methacrylate

		•	•	•	•
Oral	LD50	4680	mg/	kg (g	uinea pig)
					nouse)
		5050	mg/	kg (ra	at)

- Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.

(Contd. on page 6)



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

(Contd. of page 5)

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

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 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.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 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.

SECTION 14: Transport information		
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann Marpol and the IBC Code	nex II of Not applicable.	
· UN "Model Regulation":	Void	

GB



Printing date 02.09.2016 Version number 6 Revision: 02.09.2016

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

(Contd. of page 6)

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

· Abbreviations and acronyms:

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

* Data compared to the previous version altered.

GB ·



Printing date 06.10.2016 Version number 6 Revision: 06.10.2016

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

· 1.1 Product identifier

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

· Article number: 070-B

· Registration number Not applicable

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 material for tooth surface conditioning

· 1.3 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

5 Whitworth Road, Stevenage,

Hertfordshir, SG1 4QS

Great Britain

Tel: +44- (0) 1438 747344 Fax: +44- (0)1438 758909 E-mail: jsdsales@js-davis.co.uk

· Further information obtainable from: Manufacturer or Supplier

· 1.4 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

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.



Printing date 06.10.2016 Version number 6 Revision: 06.10.2016

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

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

· Dangerous components: Void

Other ingredients:

N-Methacryloyl-5-aminosalicylic acid

Water Catalysts Accelerators

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures See Section 8.
- 6.2 Environmental precautions: Dilute with plenty of water.
- · 6.3 Methods and material for containment and cleaning up:

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

• **6.4 Reference to other sections** No dangerous substances are released.

SECTION 7: Handling and storage

· 7.1 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.
- · 7.2 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: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

(Contd. on page 3)



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

(Contd. of page 2)

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 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:

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.
- · 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Protection of hands:

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: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

9.1 Information on basic physical a General Information	and chemical properties
- Appearance:	
Form:	Liquid
Colour:	Transparent
Odour:	Odourless
· pH-value:	Not determined
· Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
· Flash point:	Not determined
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
· Danger of explosion:	Product does not present an explosion hazard

(Contd. on page 4)



Printing date 06.10.2016 Version number 6 Revision: 06.10.2016

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

		(Contd. of page 3
Explosion limits:		
Lower:	Not determined	
Upper:	Not determined	
Oxidising properties	Not determined	
· Vapour pressure:	Not determined	
Density:	1.0 g/cm ³	
Relative density	Not determined	
· Vapour density	Not determined	
Evaporation rate	Not determined	
· Solubility in / Miscibility with		
water:	Fully miscible.	
· Partition coefficient (n-octanol/	water): Not determined	
· Viscosity:	Not determined	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Generally not hazardous for water

(Contd. on page 5)



Printing date 06.10.2016 Version number 6 Revision: 06.10.2016

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

(Contd. of page 4)

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Smaller quantities can be disposed of with household waste.
- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport informa	ntion	
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann Marpol and the IBC Code	nex II of Not applicable.	
· UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

* Data compared to the previous version altered.

GB



Printing date 06.10.2016 Version number 5 Revision: 06.10.2016

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

· 1.1 Product identifier

Trade name: PANAVIA F 2.0; OXYGUARD II

· Article number: 089-O

· Registration number Not applicable

· 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 material for curing promotion and surface protection
- · 1.3 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

5 Whitworth Road, Stevenage,

Hertfordshir, SG1 4QS

Great Britain

Tel: +44- (0) 1438 747344 Fax: +44- (0)1438 758909 E-mail: jsdsales@js-davis.co.uk

- · Further information obtainable from: Manufacturer or Supplier
- 1.4 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

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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Version number 5 Revision: 06.10.2016 Printing date 06.10.2016

Trade name: PANAVIA F 2.0; OXYGUARD II

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 56-81-5 EINECS: 200-289-5

glycerol

substance with a Community workplace exposure limit 50-70%

Other ingredients:

Polyethyleneglycol

Catalysts Accelerators

Dyes

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eve contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures See Section 8.
- 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

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

- 6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.

(Contd. on page 3)



Printing date 06.10.2016 Version number 5 Revision: 06.10.2016

Trade name: PANAVIA F 2.0; OXYGUARD II

(Contd. of page 2)

- · 7.2 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 oxidising 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.

• 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 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:

56-81-5 glycerol

WEL Long-term value: 10 mg/m³

- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Not required.
- Protection of hands:

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: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Gel
Colour: Green
Odour: Odourless
Odour threshold: Not determined.

· pH-value: Not determined

(Contd. on page 4)



Printing date 06.10.2016 Version number 5 Revision: 06.10.2016

Trade name: PANAVIA F 2.0; OXYGUARD II

		(Contd. of page
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	18.2 °C (glycerol) 290 °C	
· Flash point:	160 °C	
· Flammability (solid, gaseous):	Not determined	
· Ignition temperature:	400 °C	
· Decomposition temperature:	Not determined	
· Self-igniting:	Not determined	
· Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:Lower:Upper:Oxidising properties	0.9 Vol % Not determined Not determined	
· Vapour pressure at 20 °C:	0.1 hPa	
Density: Relative density Vapour density Evaporation rate	Not determined Not determined Not determined	
· Solubility in / Miscibility with water:	Fully miscible.	
· Partition coefficient (n-octanol/wat	ter): Not determined	
· Viscosity: · Dynamic: · Kinematic:	Not determined Not determined Not determined	
Solids content: 9.2 Other information	38.0 % No further relevant information available.	

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eve damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.

(Contd. on page 5)



Printing date 06.10.2016 Version number 5 Revision: 06.10.2016

Trade name: PANAVIA F 2.0; OXYGUARD II

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- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- 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.

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 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.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport informa	tion	
14.1 UN-Number ADR, ADN, IMDG, IATA	Void	
<u> </u>		
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
· Class	Void	
14.4 Packing group		
· ADR, IMDG, IATA	Void	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann	nex II of	
Marpol and the IBC Code	Not applicable.	

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· UN "Model Regulation": Void

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

* Data compared to the previous version altered.

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