

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/22/2007

Reviewed on 01/22/2007

1 Identification of substance

- **Product details**
- **Trade name:** PANAVIA F 2.0 ; PASTE B (TC, White, Light, Opaque)
- **Article number:** US089-PB
- **Application of the substance / the preparation** Resin-based dental adhesive cement
- **Manufacturer:**
 Kuraray Medical Inc.
 1621 Sakazu, Kurashiki, Okayama 710-0801,
 Japan
- **Supplier:**
 Kuraray America, Inc.
 600 Lexington Avenue, 26th Floor, New York,
 NY10022 U.S.A.
 Tel: 800-879-1676
 Fax: 888-700-5200
 Website: www.kuraraydental.com
- **Information department:** Supplier

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7681-49-4	sodium fluoride	< 10%
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· **Other ingredients:**

- Hydrophobic aromatic dimethacrylate
- Hydrophobic aliphatic dimethacrylate
- Hydrophilic aliphatic dimethacrylate
- Silanated barium glass filler
- Initiators
- Accelerators
- Pigments
- Others

3 Hazards identification

- **Hazard description:**
Harmful
- **Information pertaining to particular dangers for man and environment:**
 The product has to be labelled due to the calculation procedure of international guidelines.
 Harmful if swallowed.
 Contact with acids liberates toxic gas.
- **Classification system:**
 The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**
 Health = 2
 Fire = 0
 Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
 Health = 2
 Fire = 0
 Reactivity = 0

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4 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:** Immediately call a doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:**
Mouth respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:** Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **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 oxidizing agents.
Store away from reducing agents.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

7681-49-4 sodium fluoride

PEL	2.5 mg/m ³ as F
REL	2.5 mg/m ³ as F
TLV	2.5 mg/m ³ as F, BEI

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

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- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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:** Not required.

9 Physical and chemical properties

· **General Information**

Form:	Pasty
Color:	Colored
Odor:	Odorless

· **Change in condition**

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

· **Flash point:** Not applicable.

· **Ignition temperature:** Not applicable

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not applicable
Upper:	Not applicable

· **Vapor pressure:** Not applicable

· Density:	2.0 g/cm ³
· Vapour density	Not applicable

· **Solubility in / Miscibility with**

Water:	Insoluble.
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· **pH-value:** Not applicable

· **Segregation coefficient (n-octanol/water):** Not applicable

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· **Dangerous reactions** No dangerous reactions known.

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· **Dangerous products of decomposition:** Carbon monoxide and carbon dioxide

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11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7681-49-4 sodium fluoride

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

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

12 Ecological information

· **General notes:**

Water hazard class 1 (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.

13 Disposal considerations

· **Product:**

· **Recommendation:**

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

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **DOT regulations:**

· **Hazard class:** -

· **Land transport ADR/RID (cross-border):**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

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15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Harmful

· **Hazard-determining components of labelling:**

sodium fluoride

· **Risk phrases:**

Harmful if swallowed.

Contact with acids liberates toxic gas.

· **Safety phrases:**

Do not breathe dust.

Wear suitable protective clothing.

In case of accident or if you feel unwell, seek medical advice immediately.

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This material and its container must be disposed of as hazardous waste.

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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: 2**

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