### **SAFETY DATA SHEETS**

### This SDS packet was issued with item:

075219605

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075219456 075219464 075219472 075219480 075219498 075219597 075219613

MSDS Name: ED Primer II-Liquid A, Panavia F 2.0 Manufacturer Name: Kuraray Medical, Inc.

Address:

1621 Sakazu,

Kurashiki, Okayama 710-8622,

Japan

Manufacturer MSDS Revision Date:
August 7, 2003

Supersedes: 8/03

Distributor Name: Kuraray America, Inc.

Distributor Address:

101 East 52nd Street,

26th Floor,

New York, NY 10022,

USA

Emergency Telephone Number: (800) 879-1676

Material Safety Data Sheet

May be used to comply with OSHARs Hazard Communication Standard, 29 CFR 1910.1200.

Standard must be consulted for specific requirement.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

SECTION 2 : Hazardous Ingredients/Identity Information

Chemical Name

2-HYDROXYETHYL METHACRYLATE CAS#

868-77-9

OSHA PEL TWA: Not Established ACGIH TLV TWA: Not Established

Hazardous: Yes Chemical Name

10-METHACRYLOYLOXYDECYL DIHYDROGEN PHOSPHATE CAS#

Not Established

OSHA PEL TWA: Not Established ACGIH TLV TWA: Not Established

Hazardous: Yes Chemical Name

N-METHACRYLOYL 5-AMINOSALICYLIC ACID CAS#

Not Established

OSHA PEL TWA: Not Established ACGIH TLV TWA: Not Established

Hazardous: Yes

```
Chemical Name
N, N'-DIETHANOL P-TOLUIDINE
                       CAS#
3077-12-1
OSHA PEL TWA: Not Established
ACGIH TLV TWA: Not Established
Hazardous: Yes
Chemical Name
WATER CAS#
7732-18-5
OSHA PEL TWA: 5 mg/m3
ACGIH TLV TWA: 5 mg/m3
Hazardous: Yes
***************
SECTION 3 : Physical And Chemical Characteristics
*****************
Physical State/Appearance:
Transparent Liquid
Vapor Pressure:
 (mmHg): Not Established
Boiling Point:
Not Applicable
Melting Point:
Not Applicable
Solubility:
In Water: Partially Soluble
Specific Gravity:
1.06
Evaporation Point:
Not Established
FlashPoint:
Not Established
Upper Flammable Explosive Limit:
Not Established
Lower Flammable Explosive Limit:
Not Established
*******************
SECTION 4 : Fire And Explosion Hazards
*****************
Flash Point:
Not Established
Upper Flammable or Explosive Limit: Not Established
Lower Flammable or Explosive Limit: Not Established
Extinguishing Media:
Dry Chemical, Form or Carbon Dioxide
Fire Fighting Instructions:
During emergency conditions, overexposure to thermal decomposition
products may cause health hazard.
Unusual Fire Hazards:
Not Established
***************
SECTION 5 : Health Hazards
****************
Applies to All Ingredients:
```

Route of Exposure:

Inhalation: No Skin: Yes Ingestion: Yes Potential Health Effects: Eye Contact: Acute: Uncured liquid may cause eye irritation. Skin Contact: Acute: Uncured liquid may cause skin irritation. Possible allergic skin reactions among some individuals. Inhalation: Acute: No adverse health effects expected. Ingestion: Acute: No adverse health effects expected. Chronic Eye Contact:a Uncured liquid may cause eye irritation. Chronic Skin Contact: Uncured liquid may cause skin irritation. Possible allergic skin reactions among some individuals. Chronic Inhalation: No adverse health effects expected. Chronic Inquestion: No adverse health effects expected. Carcinogenicity: OSHA Designation: Regulated: No NTP Designation: No IARC Designation: Monograph: No Signs/Symptoms: Eye Contact: Irritation \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* SECTION 6 : Emergency And First Aid Procedures \*\*\*\*\*\*\*\*\*\*\*\*\*\* Eye Contact: Flush with water and consult a physician immediately if uncured paste comes in contact with eyes. Skin Contact: Wash with soap and water immediately. Inhalation: Not Established Inqestion: Considered as practically non-toxic orally. Other First Aid: Mucosal Contact: Wash with water. \*\*\*\*\*\*\*\*\*\*\*\*\* SECTION 7 : Reactivity Data \*\*\*\*\*\*\*\*\*\*\*\* Chemical Stability: Stable Incompatibilities with Other Materials: (Materials to Avoid): Zinc Oxide Eugenol Hazardous Polymerization: Will Not Occur Hazardous Decomposition Products: Not Established

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*******************
SECTION 8 : Precautions For Safe Handling
******************
Spill Cleanup Measures:
 Wipe up with paper towels and dispose in a suitable container.
Other Precautions:
 Use according to directions. Contact with skin, soft tissue, eye and
clothing should be avoided.
Storage:
 Store at normal room temperature or refrigerated. Store away from
reducing agent.
Hygiene Practices:
Use good personal hygene.
Waste Disposal:
Discharge in accordance with applicable regulations.
*********************
SECTION 9 : Control Measures
****************
Ventilation System:
Not Applicable
Mechanical: Not Applicable
Special: Not Applicable
Local Exhaust:
Not Applicable
Other Exhaust Information:
Not Applicable
Hand Protection Description:
Protective Gloves: Wear impervious gloves to prevent skin contact.
Eye/Face Protection:
Safety glasses or goggles for eye protection.
Protective Clothing/Body Protection:
Not Established
Respiratory Protection:
 (Specific Type): Not Applicable
Other Protective:
Not Established
Work/Hygienic Practices: Use good personal hygene.
*************
SECTION 10 : Other Information
**************
Applies to all ingredients:
OSHA 29 CFR 1200:
Material Safety Data Sheet
May be used to comply with OSHARS Hazard Communication Standard, 29 CFR
1910.1200.
Standard must be consulted for specific requirement.
```

MSDS Revision Date:

August 7, 2003 Supersedes: 8/03

Disclaimer:

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

Abbreviations:

N/E - Not Established N/A - Not Applicable



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#### 1 Identification

· Product identifier

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

· Article number: US070-A

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
- · Details of the supplier of the safety data sheet
- · Manufacturer:

Kuraray Noritake Dental Inc.

1621 Sakazu, Kurashiki, Okayama 710-0801,

Japan

· Contact information:

Kuraray America, Inc.

33 Maiden Lane, 6th Floor, New York,

NY 10038 U.S.A. Tel: 800-879-1676 Fax: 888-700-5200

Website: www.kuraraydental.com

· Emergency telephone number:

For chemical emergency spill, leak, fire, exposure or accident

Call CHEMTREC day and night

Within USA and Canada: 1-800-424-9300 CCN706984 or

+1 703-527-3887 (collect calls accepted)

#### 2 Hazard(s) identification

· Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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

2-hydroxyethyl methacrylate

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/vapors/spray

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

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

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.

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P363 Wash contaminated clothing before reuse.

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

regulations.

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

### 3 Composition/information on ingredients

· Chemical characterization: Substances None

· Chemical characterization: Mixtures

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

Dangerous components:

868-77-9 2-hydroxyethyl methacrylate

30-50%

🕠 Skin Irrit. 2, H315; Eye Irrit. 2A, 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; immediately call for medical help.

If symptoms persist consult doctor.

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

No further relevant information available.

#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing 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.

LIS.



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

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#### 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

**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 protection against explosions and fires: 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 receptacle 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 systems: No further data; see item 7.
- · Control parameters
- Components 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 that were valid during the creation 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.

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.

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#### 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:	Liquid
Color:	Transparent
· Odor:	Odorless
· pH-value:	Not determined
· Change in condition	
Melting point/Melting range:	-12 °C (2-hydroxyethyl methacrylate)
<b>Boiling point/Boiling range:</b>	205 °C (2-hydroxyethyl methacrylate)
· Flash point:	97 °C (2-hydroxyethyl methacrylate)
· Ignition temperature:	Not determined
· Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Oxidizing properties	Not determined
· Vapor pressure:	Not determined
· Density:	1.1 g/cm <sup>3</sup>
Relative density	Not determined
· Vapor density	Not determined
Evaporation rate	Not determined

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· Solubility in / Miscibility with

Water: Partly miscible.

Partition coefficient (n-octanol/water): Not determined

· Viscosity: Not determined

**Other information** No further relevant information available.

### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- **Possibility of hazardous reactions** No dangerous reactions known.
- · 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 that are 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.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

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

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### 12 Ecological information

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

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- · Additional 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.

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

### 13 Disposal considerations

- · Waste treatment methods
- 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.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
Packing group DOT, ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Void

### 15 Regulatory information

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

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

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· 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.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

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.

· 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.

· Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

· NFPA ratings (scale 0 - 4)



Health = 1Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 $\begin{aligned} & \text{Health} = 1 \\ & \text{Fire} = 1 \end{aligned}$ 

REACTIVITY 0 Reactivity = 0

Abbreviations and acronyms:

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

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

Skin Sens. 1: Skin sensitisation – Category 1

\* Data compared to the previous version altered.

US