SAFETY DATA SHEETS

This SDS packet was issued with item: 075219613

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

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 077457591



Version 6

Reviewed on 07/31/2017

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

Tel: 800-8/9-16

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

GHS07

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

i i ccautional y su	atements
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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US

30-50%



Safety Data Sheet acc. to OSHA HCS

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

- P363 (Contd. of page 1) P501 Wash contaminated clothing before reuse. 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

🚯 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.

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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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US –



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

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US

· 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:



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Tightly sealed goggles

9 Physical and chemical prope	rties	
· Information on basic physical and · General Information	chemical properties	
Appearance:		
Form:	Liquid	
Color:	Transparent	
· Odor:	Odorless	
· pH-value:	Not determined	
• Change in condition		
Melting point/Melting range:	-12 °C (2-hydroxyethyl methacrylate)	
Boiling point/Boiling range:	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 ³	
- Relative density	Not determined	
· Vapor density	Not determined	
Evaporation rate	Not determined	
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Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

		(Contd. of page 4
· Solubility in / Miscibility with	h	
Water:	Partly miscible.	
· Partition coefficient (n-octan	ol/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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Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid A

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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.

\cdot 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.

14 Transport information

Void
Void
Void
Void
No
Not applicable.
o f Not applicable.
Void

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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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Safety Data Sheet acc. to OSHA HCS

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

	(Contd. of page 6)
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)

HEALTH 1 Health = 1FIRE 1 Fire = 1**REACTIVITY** 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.



Version 6

Reviewed on 07/28/2017

1 Identification

· Product identifier

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

• Article number: US070-B

 \cdot 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

The product is not classified according to the Globally Harmonized System (GHS).

· Label elements

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards

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- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

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

· Dangerous components: Void

Other ingredients:

N-Methacryloyl-5-aminosalicylic acid Water Catalysts

Accelerators

4 First-aid measures

· Description of first aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)

⁻ US



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Reviewed on 07/28/2017

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

(Contd. of page 1)

• 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.

· 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: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures See Section 8.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections No dangerous substances are released.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · 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: Not required.
- 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:

The usual precautionary measures for handling chemicals should be followed.

(Contd. on page 3)



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(Contd. of page 2)

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

• Breathing equipment: 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.

9 Physical and chemical properties

· Information on basic physical and	chemical properties
· General Information	chemical properties
Appearance:	
Form:	Liquid
Color:	Transparent
· Odor:	Odorless
· 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.
• Explosion limits:	
Lower:	Not determined
Upper:	Not determined
• Oxidizing properties	Not determined
· Vapor pressure:	Not determined
Density:	1.0 g/cm^3
- Relative density	Not determined
Vapor density	Not determined
· Evaporation rate	Not determined
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wat	ter): Not determined
· Viscosity:	Not determined
· Other information	No further relevant information available.

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Safety Data Sheet acc. to OSHA HCS

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

(Contd. of page 3)

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used 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:
- · 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 is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· 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.
- · Additional ecological information:
- · General notes: Generally not hazardous for water
- 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. on page 5)



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

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· 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	II of Not applicable.	
UN "Model Regulation":	Void	

15 Regulatory information

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 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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.	
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.	
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Trade name: PANAVIA F 2.0 ; ED PRIMER || Liquid B

(Contd. of page 5)

· 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.

• NFPA ratings (scale 0 - 4)

· HMIS-ratings (scale 0 - 4)



** Data compared to the previous version altered.

- US