

Printing date 03/09/2015

Reviewed on 04/01/2015

#### 1 Identification

· Product identifier

· Trade name: PANAVIA 21; ED PRIMER A

· Article number: CA050-EA

- · 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

### 2 Composition/information on ingredients

- · 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. 2, H319; Skin Sens. 1, H317

25-50%

Other ingredients:

10-Methacryloyloxydecyl dihydrogen phosphate

N-Methacryloyl-5-aminosalicylic acid

Water

Accelerators

#### 3 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

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Trade name: PANAVIA 21; ED PRIMER A

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P280 Wear protective gloves.

P280 Wear 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).

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

regulations.

- · Hazard description:
- · WHMIS-symbols:

D2B - Toxic material causing other toxic effects



- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



1 Health = 1 1 Fire = 1

Reactivity = 0

# 4 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.

#### **5 Fire-fighting measures**

· 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.
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

Dilute with plenty of water.

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

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Trade name: PANAVIA 21; ED PRIMER A

(Contd. of page 2)

· Methods and material for containment and cleaning up:

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

· 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

- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · 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: 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.
- · 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.
- · 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 eves and skin.

- · Breathing equipment: Not required.
- · 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.

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(Contd. of page 3)



# Material Safety Data Sheet selon ISO/DIS 11014

Printing date 03/09/2015 Reviewed on 04/01/2015

Trade name: PANAVIA 21; ED PRIMER A

· Eye protection:



Tightly sealed goggles

#### 9 Physical and chemical properties

· General Information · Appearance: Form: Liquid Color: Transparent · Odor: Odorless · pH-value: Not applicable · 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 applicable · Danger of explosion: Product does not present an explosion hazard. · Explosion limits: Lower: Not applicable Not applicable Upper: · Vapor pressure: Not applicable · Density: 1.1 g/cm<sup>3</sup> · Vapour density Not applicable · Solubility in / Miscibility with Water: Partly miscible. · Partition coefficient (n-octanol/water): Not applicable · Other information No further relevant information available.

# 10 Stability and reactivity

- $\cdot$  Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

#### 11 Toxicological information

5050 mg/kg (rat)

· Acute toxicity:

1104		
· LD/I	LC50 v	alues that are relevant for classification:
868-	77-9 2-	hydroxyethyl methacrylate
Oral	LD50	4680 mg/kg (guinea pig)
		3275 mg/kg (mouse)

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Trade name: PANAVIA 21; ED PRIMER A

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- · 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.

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

None of the ingredients is listed.

#### 12 Ecological information

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · 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.

# 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.

· UN-Number		
· DOT, TDG, ADN, IMDG, IATA	Void	
· UN proper shipping name · DOT, TDG, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, TDG, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· DOT, TDG, IMDG, IATA	Void	
· Environmental hazards:		
· Marine pollutant:	No	

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· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

#### 15 Regulatory information

·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.

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

None of the ingredients is listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

868-77-9 2-hydroxyethyl methacrylate

### 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
- · Relevant phrases

H315 Causes skin irritation.

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Trade name: PANAVIA 21; ED PRIMER A

(Contd. of page 6)

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

· Abbreviations and acronyms:

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

CDN



Printing date 03/09/2015

Reviewed on 04/01/2015

#### 1 Identification

· Product identifier

· Trade name: PANAVIA 21; ED PRIMER B

· Article number: CA050-EB

- · 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

### 2 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

#### 3 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
- · Classification system:
- · NFPA ratings (scale 0 4)



 $\begin{aligned} & \text{Health} = 0 \\ & \text{Fire} = 0 \\ & \text{Reactivity} = 0 \end{aligned}$ 

· HMIS-ratings (scale 0 - 4)

HEALTH 0 Health = 0 FIRE 0 Fire = 0 REACTIVITY 0 Reactivity = 0

## 4 First-aid measures

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

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Trade name: PANAVIA 21; ED PRIMER 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.

#### **5 Fire-fighting measures**

- · 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.
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- 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

- · Precautions for safe handling No special measures required.
- · 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: 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.
- · 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.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · 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.

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Trade name: PANAVIA 21; ED PRIMER B

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· 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

Thysical and chemical proper	
· General Information	
· Appearance:	
Form:	Liquid
Color:	Transparent
· Odor:	Odorless
· pH-value:	Not applicable
· Change in condition	
Melting point/Melting range:	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
· 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:	1.0 g/cm <sup>3</sup>
· Vapour density	Not applicable
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wat	ter): Not applicable
· Other information	No further relevant information available.

### 10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

### 11 Toxicological information

- · 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:

(Contd. on page 4)



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Trade name: PANAVIA 21; ED PRIMER B

(Contd. of page 3)

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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

### 12 Ecological information

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water

### 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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information		
· UN-Number · DOT, TDG, ADN, IMDG, IATA	Void	
· UN proper shipping name · DOT, TDG, ADN, IMDG, IATA	Void	
Transport hazard class(es)		
· DOT, TDG, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, TDG, 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":	-	



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Trade name: PANAVIA 21; ED PRIMER B

(Contd. of page 4)

### 15 Regulatory information

- ·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.

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

None of the ingredients is listed.

- · Canadian substance listings:
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

### 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

CDN



Printing date 03/09/2015

Reviewed on 04/01/2015

#### 1 Identification

· Product identifier

· Trade name: PANAVIA 21; UNIVERSAL PASTE

· Article number: CA050-PU

· Application of the substance / the mixture Resin-based dental adhesive cement

· 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

### 2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components: Void
- · Other ingredients:

Hydrophobic aromatic dimethacrylate

Hydrophobic aliphatic methacrylate

Hydrophilic aliphatic dimethacrylate

Silanated titanium oxide

Silanated barium glass filler

Catalysts

Accelerators

**Pigments** 

# 3 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
- · Classification system:
- · NFPA ratings (scale 0 4)



(Contd. on page 2)



Printing date 03/09/2015 Reviewed on 04/01/2015

Trade name: PANAVIA 21; UNIVERSAL PASTE

· HMIS-ratings (scale 0 - 4)

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#### 4 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.

#### **5** Fire-fighting measures

- · 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.
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections No dangerous substances are released.

#### 7 Handling and storage

- · Precautions for safe handling No special measures required.
- · 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: 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.
- · 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.
- · Personal protective equipment:
- $\cdot$  General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment: Not required.

(Contd. on page 3)



Printing date 03/09/2015 Reviewed on 04/01/2015

Trade name: PANAVIA 21; UNIVERSAL PASTE

(Contd. of page 2)

#### · 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

G 17.6 (1	
General Information	
· Appearance:	
Form:	Pasty
Color:	Colored
· Odor:	Odorless
· pH-value:	Not applicable
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· 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:	1.9 g/cm <sup>3</sup>
· Vapour density	Not applicable
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/water)	: Not applicable
· Other information	No further relevant information available.

#### 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

CDN ·



Printing date 03/09/2015 Reviewed on 04/01/2015

Trade name: PANAVIA 21; UNIVERSAL PASTE

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### 11 Toxicological information

- · 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.

· OSHA-Ca (Occupational Safety & Health Administration)

All ingredients are listed.

#### 12 Ecological information

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:

· Marine pollutant:

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

· UN-Number		
DOT, TDG, ADN, IMDG, IATA	Void	
· UN proper shipping name		
DOT, TDG, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, TDG, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· DOT, TDG, IMDG, IATA	Void	

No

(Contd. on page 5)



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Trade name: PANAVIA 21; UNIVERSAL PASTE

(Contd. of page 4)

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

#### 15 Regulatory information

·Sara

· Section 355 (extremely hazardous substances):

All ingredients are listed.

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

All ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

All ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

All ingredients are listed.

· Chemicals known to cause developmental toxicity:

All ingredients are 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)

All ingredients are listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

#### 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.

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Printing date 03/09/2015

Reviewed on 04/01/2015

#### 1 Identification

· Product identifier

· Trade name: PANAVIA 21; CATALYST PASTE

· Article number: CA050-PC

- · Application of the substance / the mixture Resin-based dental adhesive cement
- · 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

### 2 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components: Void
- · Other ingredients:

10-Methacryloyloxydecyl dihydrogen phosphate

Hydrophobic aromatic dimethacrylate

Hydrophobic aliphatic methacrylate

Silanated silica filler

Colloidal silica

Catalysts

#### 3 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
- · Classification system:
- · NFPA ratings (scale 0 4)



 $\begin{aligned} & \text{Health} = 0 \\ & \text{Fire} = 0 \\ & \text{Reactivity} = 0 \end{aligned}$ 

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 0 Reactivity = 0



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Trade name: PANAVIA 21; CATALYST PASTE

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#### 4 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.

#### **5 Fire-fighting measures**

- · 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.
- · Protective equipment: No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections No dangerous substances are released.

### 7 Handling and storage

- · Precautions for safe handling No special measures required.
- · 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: 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.
- · 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.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · 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

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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

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General Information	
Appearance:	
Form:	Pasty
Color:	White
· Odor:	Odorless
· pH-value:	Not applicable
· Change in condition	
Melting point/Melting range:	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
· 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 <sup>3</sup>
· Vapour density	Not applicable
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/wat	ter): Not applicable
Other information	No further relevant information available.

# 10 Stability and reactivity

 $\cdot$  Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: Carbon monoxide and carbon dioxide

### 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.

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#### · 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.

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

All ingredients are listed.

### 12 Ecological information

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water

#### 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.

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

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### 15 Regulatory information

- ·Sara
- · Section 355 (extremely hazardous substances):

All ingredients are listed.

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

All ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

All ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

All ingredients are listed.

· Chemicals known to cause developmental toxicity:

All ingredients are listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

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· TLV (Threshold Limit Value established by ACGIH)

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