# **SAFETY DATA SHEETS**

This SDS packet was issued with item: 075217559

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).

074576005 074576047 074576054 075218276 075218292 075229604 075229612 075229620 075229638 075229646



# Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

#### Reviewed on 04/01/2012

#### **1** Identification of the substance/mixture and of the company/undertaking

#### · Product identifier

#### · Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

- Article number: 173
- · Application of the substance / the preparation 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: Single Component

 $\cdot$  **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
1565-94-2	bisphenol A diglycidylmethacrylate	🗙 Xi R36/38
		🕂 H315; H319
109-16-0	triethylene glycol dimethacrylate	🗙 Xi R36/37/38
		🚺 H315; H319; H335

#### · Other ingredients:

Hydrophobic aromatic dimethacrylate Hydrophilic aliphatic dimethacrylate Silanated silica filler Silanated barium glass filler Colloidal silica dl-Camphorquinone Catalysts Accelerators Pigments Others

## **3 Hazards identification**

· Classification of the substance or mixture



H315 Causes skin irritation.

- H319 Causes serious eye irritation.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines. • Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

CA

2.5-10%

2.5-10%



# Reviewed on 04/01/2012

### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

	(Contd. of page 1)
· Label elements	
· GHS label eleme	nts
The product is cla	ssified and labelled according to the Globally Harmonized System (GHS).
· Hazard pictogram	ms GHS07
· Signal word War	ning
<ul> <li>Hazard statement</li> </ul>	its
H315 Causes skin	irritation.
H319 Causes serie	ous eye irritation.
<ul> <li>Precautionary st</li> </ul>	atements
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	B 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).
P362	Take off contaminated clothing and wash before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Material Safety Data Sheet

acc. to ISO/DIS 11014

#### 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.
- $\cdot$  After eye contact: Rinse opened eye for several minutes under running water.
- $\cdot$  After swallowing: If symptoms persist consult doctor.

### **5** Firefighting 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.
- $\cdot$  Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- $\cdot$  Methods and material for containment and cleaning up:  $\mbox{Pick}$  up mechanically.
- $\cdot$  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.

· Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- 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.

(Contd. on page 3)



## Material Safety Data Sheet acc. to ISO/DIS 11014

Reviewed on 04/01/2012

### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

(Contd. of page 2) · 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. · 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		
· Appearance:		
Form:	Pasty	
Color:	Colored	
· 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.	
· Segregation coefficient (n-octonol/wa	ter): Not applicable	
· Other information	No further relevant information available.	

(Contd. on page 4)



# **KUCOLOGY** Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

# Reviewed on 04/01/2012

# Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

(Contd. of page 3)

# **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:

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.

## **12 Ecological information**

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



Reviewed on 04/01/2012

#### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

	(Conto	d. of page 4)
<ul> <li>Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No	
· 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**

· 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.

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

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 Administation)

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: 1

- · Relevant phrases
- Causes skin irritation. H315
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R36/38 Irritating to eyes and skin.



# Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

#### Reviewed on 04/01/2012

#### **1** Identification of the substance/mixture and of the company/undertaking

#### · Product identifier

#### · Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

- Article number: 173
- · Application of the substance / the preparation 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: Single Component

 $\cdot$  **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
1565-94-2	bisphenol A diglycidylmethacrylate	🗙 Xi R36/38
		🕂 H315; H319
109-16-0	triethylene glycol dimethacrylate	🗙 Xi R36/37/38
		🚺 H315; H319; H335

#### · Other ingredients:

Hydrophobic aromatic dimethacrylate Hydrophilic aliphatic dimethacrylate Silanated silica filler Silanated barium glass filler Colloidal silica dl-Camphorquinone Catalysts Accelerators Pigments Others

## **3 Hazards identification**

· Classification of the substance or mixture



H315 Causes skin irritation.

- H319 Causes serious eye irritation.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines. • Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

(Contd. on page 2)

CA

2.5-10%

2.5-10%



# Reviewed on 04/01/2012

### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

	(Contd. of page 1)
· Label elements	
· GHS label eleme	nts
The product is cla	ssified and labelled according to the Globally Harmonized System (GHS).
· Hazard pictogram	ms GHS07
· Signal word War	ning
<ul> <li>Hazard statement</li> </ul>	its
H315 Causes skin	irritation.
H319 Causes serie	ous eye irritation.
<ul> <li>Precautionary st</li> </ul>	atements
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	B 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).
P362	Take off contaminated clothing and wash before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Material Safety Data Sheet

acc. to ISO/DIS 11014

#### 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.
- $\cdot$  After eye contact: Rinse opened eye for several minutes under running water.
- $\cdot$  After swallowing: If symptoms persist consult doctor.

### **5** Firefighting 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.
- $\cdot$  Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- $\cdot$  Methods and material for containment and cleaning up:  $\mbox{Pick}$  up mechanically.
- $\cdot$  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.

· Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- 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.

(Contd. on page 3)



## Material Safety Data Sheet acc. to ISO/DIS 11014

Reviewed on 04/01/2012

### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

(Contd. of page 2) · 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. · 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		
· Appearance:		
Form:	Pasty	
Color:	Colored	
· 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.	
· Segregation coefficient (n-octonol/wa	ter): Not applicable	
· Other information	No further relevant information available.	

(Contd. on page 4)



# **KUCOLOGY** Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/07/2012

# Reviewed on 04/01/2012

# Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

(Contd. of page 3)

# **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:

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.

## **12 Ecological information**

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



Reviewed on 04/01/2012

#### Trade name: CLEARFIL ESTHETIC CEMENT EX ; PASTE A & B

	(Conto	d. of page 4)
<ul> <li>Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No	
· 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**

· 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.

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

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 Administation)

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: 1

- · Relevant phrases
- Causes skin irritation. H315
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R36/38 Irritating to eyes and skin.