SAFETY DATA SHEETS

This SDS packet was issued with item:

071837574

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).

071837483

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ASTIO MSDS ID: 997821
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View Section: 12345678910111213141516

Personal Protective Pictograms

Gloves Full Suit Splash Goggles

GHS Pictograms

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION 51C700

Product Name: SureFil SDR Flow - Posterior Bulk Fill Flowable Base

Manufacturer MSDS,:51C700

Manufacturer Name: Dentsply/Caulk

Address: 38 West Clarke Avenue

Milford DE 19963-1805

http://www.caulk.com http://www.dentsply.com

Emergency Telephone Number:

(302) 422-4511 (8:00 AM - 4:30 PM Eastern Time)

General Use: Product Use (for Canada): Light Curing Composite/Dental

Filling Material

Base

Department: DENTSPLY/International

Business Phone: (302) 422-4511

Hours Of Operation: (8:00 AM - 4:30 PM Eastern Time)

Revision Date: 4/22/09

Trade Names: SureFil« SDR(TM) Flow - Posterior Bulk Fill Flowable

Substance Identity: SureFil« SDR(TM) Flow

Grades or Minor Variant Identities: Not Applicable

NFPA Hazard Classification Ratings (Scale 0-4)

Product Codes: 51C700

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NFPA
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************** SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS51C700 ***************

Ingredient NameCAS#Ingredient Percent

Polymerizable dimethacrylate resins24448-20-2< 10% Hazardous: Yes EC Index Number:1 Other Exposure Guidelines: Not Established

Polymerizable dimethacrylate resins109-16-0 Hazardous:Yes EC Index Number:1

Polymerizable urethane dimethacrylateProprietary< 25% Hazardous:Yes EC Index Number:1 Other Exposure Guidelines: Not Established

Barium boron fluoro alumino silicate glass65997-18-4< 50% Hazardous:Yes EC Index Number:1 Other Exposure Guidelines: Not Established

Silicon Dioxide - Amorphous68611-44-9< 5% Hazardous: Yes EC Index Number:1 Other Exposure Guidelines: 3 mg/m3

Strontium Aluminosilicate GlassNot Available< 50% Hazardous:Yes EC Index Number:1 Other Exposure Guidelines:Not Established

Titanium Dioxide13463-67-7< 1% Hazardous:Yes EC Index Number:1

Other Exposure Guidelines:10 mg/m3

Other Information: Colorants are synthetic inorganic iron oxides.

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Emergency Overview: Material is irritating to eyes, respiratory system and skin.

DANGER
MAY CAUSE ALLERGY OR ASTHMA
SYMPTOMS OR BREATHING
DIFFICULTIES IF INHALED

WARNING

MAY CAUSE AN ALLERGIC SKIN REACTION

Applies to All Ingredients :

Target Organs: Eye: Not Applicable

Skin: Not Applicable

Inhalation: Not Applicable Ingestion: Not Applicable Other: Not Applicable Signs/Symptoms: Eye

Signs and Symptoms: Material can cause irritation.

Skin:

Signs and Symptoms: Material may be an irritant

Inhalation:

Signs and Symptoms: Not Applicable

Ingestion:

Signs and Symptoms: Material is probably not harmful if swallowed

Other:

Signs and Symptoms: Not Applicable
Aggravation of Pre-Existing Conditions: Open sores and wounds of the skin. Individuals with known sensitivity to methacrylates,

acrylates, or urethane dimethacrylate resin used in Dental restorative products.

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SECTION 4 : FIRST AID MEASURES51C700

Eye Contact:Routes of Exposure: Eye

First Aid Instructions: Rinse opened eye for several minutes under running water. If symptoms persist consult physician

Immediate Medical Attention: Not Applicable

Delayed Effects: Not Applicable

Skin Contact: Routes of Exposure: Skin

First Aid Instructions: Immediately wash with soap and water

and rinse thoroughly

Immediate Medical Attention: Not Applicable

Delayed Effects: Not Applicable

Inhalation: Routes of Exposure: Inhalation

First Aid Instructions: Supply fresh air, consult physician if

symptoms persist

Immediate Medical Attention: Not Applicable

Delayed Effects: Not Applicable

Ingestion: Routes of Exposure: Ingestion

First Aid Instructions: If symptoms persist consult physicia...

Immediate Medical Attention: Not Applicable

Delayed Effects: Not Applicable

Note to Physicians: (Treating, Testing and Monitoring): Treat

symptomatically.

Other First Aid:Routes of Exposure: Other First Aid Instructions: Not Applicable

Immediate Medical Attention: Not Applicable

Delayed Effects: Not Applicable

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SECTION 5 : FIRE FIGHTING MEASURES51C700

Flash Point: Not Applicable

Flash Point Method: Not Applicable

Upper Flammable or Explosive Limit: In Air: Not Applicable Lower Flammable or Explosive Limit: In Air: Not Applicable Auto Ignition Temperature: Not Applicable, Product will not autoignite.

Flammability Class: Not Applicable

Extinguishing Media: CO2, extinguishing powder, foam carbon dioxide or water spray. Fight larger fires with water spray or alcohol resistant foam.

Extinguishing Media to Avoid: Water with full jet.

Flame Propagation in Air:Flame Propagation or Burning Rate (for Solids): Not Applicable

Fire Fighting Instructions: Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.

Unusual Fire Hazards: Formatin of toxic, irritating gases is possible from the decomposition of the dimethacrylate resins. Product does not present an explosion hazard.

Properties Contributing to Fire Intensity: Not Applicable

Other: Not Applicable

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Spill Cleanup Measures: Spill/Leak Clean-up Procedures and Equipment: Wear protective clothing and scoop up bulk material and place in a labeled plastic or metal container. Avoid gross skin contact to minimize the possibility of contact dermatitis to susceptible persons. Ensure adequate ventilation. Containment Techniques: Material is a paste and as such will not flow.

Evacuation Procedures: Not Applicable

Special Instructions: Not Applicable

Reporting Requirements: Not Applicable

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Handling: Handling Practices and Warnings: Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals.

Storage: Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store in a dry area. Protect from exposure to direct light. Store away from food and beverages.

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Engineering Controls:Not Applicable

Skin Protection Description: Personal Protective Equipment for Normal Use: The glove material has to be impermeable and resistant to the Eye/Face Protection: Personal Protective Equipment for Normal Safety Glasses Protective Clothing/Body Protection: Personal Protective Equipment for Normal Use: Protective work clothing Respiratory Protection: Personal Protective Equipment for Normal Use: Inhalation: Not Required Emergency Skin Protection: Personal Protective Equipment for Emergencies: Not Applicable Emergency Eye/Face Protection: Personal Protective Equipment for Emergencies: Not Applicable Emergency Clothing/Body Protection: Personal Protective Equipment for Emergencies: Not Applicable Emergency Respiratory Protection: Personal Protective Equipment for Emergencies: Inhalation: Not Applicable Exposure Limits: Occupational Exposure Limits: Not Applicable To Top of page ************* SECTION 9: PHYSICAL and CHEMICAL PROPERTIES51C700 ***************** Physical State/Appearance: Various shades of viscous paste. Odor:Characteristic sweet acrylic ester odor. Physical State: Normal Physical State: Very High Viscosity Liquid (Paste) pH:Not Applicable Vapor Pressure: (mm Hg): Not Applicable Vapor Density: (AIR=1): Not Applicable Flash Point: Not Applicable Flash Point Method: Not Applicable Auto Ignition Temperature: Not Applicable, Product will not autoignite. Upper Explosive Limit: In Air: Not Applicable Lower Explosive Limit: In Air: Not Applicable Melting Point: Not Applicable Solubility: In Water: Not soluble Specific Gravity: 1.9 q/cm3 Evaporation Point: (Butyl Acetate = 1): Not Applicable Other:Not Applicable To Top of page SECTION 10 : STABILITY and REACTIVITY51C700

Chemical Stability:Stable
Conditions to Avoid:None known
Incompatibilities with Other Materials:(Materials to Avoid):
Strong Oxidizing materials.
Hazardous Polymerization:May Not Occur
Conditions to Avoid: None known
Hazardous Decomposition Products:Hazardous Products Produced
During Decomposition: No dangerous decomposition products
known if used according to Directions for Use.

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Applies to All Ingredients: Routes of Exposure: Eye, Skin, Inhalation, Ingestion, Other Eye Effect: Single, Repeated, or Lifetime Exposure: Single Severity (Mild, Moderate, Severe): Moderate Acute Health Effect(s): Irritation and possible corneal damage Skin Effects: Single, Repeated, or Lifetime Exposure: Single & Repeated Severity (Mild, Moderate, Severe): Moderate Acute Health Effect(s): Irritation or possible allergic response. Severe allergic response may result in breathing difficulties. Ingestion Effects: Single, Repeated, or Lifetime Exposure: Not Applicable Severity (Mild, Moderate, Severe): Mild Acute Health Effect(s): Not Applicable Inhalation Effects: Single, Repeated, or Lifetime Exposure: Not Applicable Severity (Mild, Moderate, Severe): Not Applicable Acute Health Effect(s): Not Applicable Chronic Eye Effects: Chronic Health Effect(s): Irritation and possible corneal damage Chronic Skin Effects: Chronic Health Effect(s): Irritation or possible allergic response. Severe allergic response may result in breathing difficulties. Chronic Ingestion Effects: Chronic Health Effect(s): Not Applicable Chronic Inhalation Effects: Chronic Health Effect(s): Not Applicable Carcinogenicity: NTP: Not listed IARC monographs: Not listed OSHA regulated: No

All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory Other Toxicological Information:Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: Product is an irritant to the skin and mucous membranes. The unpolymerized product may be an irritant to the skin in

susceptible persons. On the eye the product has an irritating effect. Sensitization: Repeated or prolonged contact with the unpolymerized material may cause sensitization for persons allergic to acrylates and methacrylates. This product shows the following dangers according to internally approved calculation methods for composite materials: Irritant.

Emergency Overview: Material is irritating to eyes, respiratory system and skin.

Eye

Signs and Symptoms: Material can cause irritation. Target Organ(s): Not Applicable

Skin

Signs and Symptoms: Material may be an irritant Target Organ(s): Not Applicable

Inhalation

Signs and Symptoms: Not Applicable Target Organ(s): Not Applicable

Ingestion

Signs and Symptoms: Material is probably not harmful if

swallowed

Target Organ(s): Not Applicable

Routes of Exposure: Other

Signs and Symptoms: Not Applicable

Single, Repeated, or Lifetime Exposure: Not Applicable Severity (Mild, Moderate, Severe): Not Applicable Acute and Chronic Health Effect(s): Not Applicable

Target Organ(s): Not Applicable

Medical Conditions Aggravated by Exposure: Open sores and wounds of the skin. Individuals with known sensitivity to methacrylates, acrylates, or urethane dimethacrylate resinused in Dental restorative products.

Potential Environmental Effects: Do not allow to enter sewers/surface or ground water.

NFPA Hazard Classification Ratings (Scale 0-4), Health = 1, Fire = 0, Reactivity = 0

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Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard class1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water streams or sewage system.

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

Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations

Properties (Physical/Chemical) Affecting Disposal: Dispose of material as solid waste in a closed container.

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DOT Shipping Name:Not Regulated DOT UN Number:Not Applicable DOT Hazard Class:Not Applicable DOT Packing Group:Not Applicable Regulated for Shipping: No. Not Regulated

Do Changes in Quantities, packaging, or shipment method change product classification: No

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Applies to all ingredients: TSCA 8(b): Inventory Status:All components of this product are in compliance with the inventory listing Requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory. CERCLA Section 103:U.S. Federal Regulations: CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations Section 302 Extremely Hazardous Substances (TPQ):None Section 313 Toxic Release Form:Section 313 Toxic Chemicals:

This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

State: U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.

Regulatory Paragraph: This product has been classified in accordance with the hazard criteria of the Globally Harmonized System of Classification and Labeling of Chemicals and the SDS contains all of the information required by the Canadian Controlled Products Regulations.

Canada WHMIS:International Regulations: Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.

European Community Chemical Inventory Status:European Community Labeling: Not a dangerous preparation.

European Inventory of New and Existing Chemicals Substances (EINECS): This product is a medical device and not subject to chemical notification requirements.

Other: Not Applicable

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NFPA:

Health:1 Fire Hazard:0 Reactivity:0

MSDS Revision Date:4/22/09

Disclaimer:

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex.

All components are synthetically produced; none are derived from animal products.

The information contained herein is accurate to the best of our knowledge.

Dentsply/Caulk makes no warranty of any kind, express or implied, concerning the safe use of this material. NFPA Hazard Classification Ratings (Scale 0-4)

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DENTSPLY/International DENTSPLY/Caulk Safety Data Sheet

51C700

1. Identification

Product Name	SDS Code Number
SureFil® SDR [™] Flow – Posterior Bulk Fill Flowable	51C700
Base	
Substance Identity	Date of Last Revision
SureFil [®] SDR [™] Flow	4/22/09
Manufacturer:	Address
DENTSPLY Caulk	38 West Clarke Avenue
	Milford DE 19963-1805
	http://www.caulk.com
	http://www.dentsply.com
Grades or Minor Variant Identities	Information Telephone Number
Not Applicable	(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)
Product Use (for Canada)	Emergency Telephone Number
Light Curing Composite/Dental Filling Material	(302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)

2. Hazard(s) Identification



DANGER
MAY CAUSE ALLERGY OR ASTHMA
SYMPTOMS OR BREATHING
DIFFICULTIES IF INHALED



MAY CAUSE AN ALLERGIC SKIN REACTION

3. Composition/Information on Ingredients

Hazardous Components	C.A.S. Number	Exposure Limits	%
Polymerizable dimethacrylate resins	24448-20-2/109-16-0	N.E.	< than 10
Polymerizable urethane dimethacrylate	Proprietary	N.E.	< than 25
Barium boron fluoro alumino silicate glass	65997-18-4	N.E.	< than 50
Silicon Dioxide - Amorphous	68611-44-9	3 mg/m^3	< than 5
Strontium Aluminosilicate Glass	N.A.	N.E.	< than 50
Titanium Dioxide	13463-67-7	10 mg/m^3	< than 1

Other Information: Colorants are synthetic inorganic iron oxides.

4. First Aid Measures

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects	
Eye	Rinse opened eye for several minutes under running water. If symptoms persist consult physician	Not Applicable	Not Applicable	
Skin	Immediately wash with soap and water and rinse thoroughly	Not Applicable	Not Applicable	
Inhalation	Supply fresh air, consult physician if symptoms persist	Not Applicable	Not Applicable	
Ingestion	If symptoms persist consult physician	Not Applicable	Not Applicable	
Other	Not Applicable	Not Applicable	Not Applicable	
Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.				

5. Fire Fighting Measures

3	0 0			
Flame Propagation or Burning Rate	Properties Contributing to Fire Intensity	Flammability Classification: Not Applicable	Other: Not Applicable	
(for Solids) Not Applicable	Not Applicable			
Extinguishing Media: CO ₂ , extinguishing powder, foam carbon dioxide or water Extinguishing Media to Avoid: Water with full jet.				
spray. Fight larger fires with water spray or alcohol resistant foam.				
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.				
Unusual Fire and Explosion Hazards: Formation of toxic, irritating gases is possible from the decomposition of the dimethacrylate resins.				
Product does not present an explosion hazard.				

DENTSPLY/International DENTSPLY/Caulk Safety Data Sheet

6. Accidental Release Measures

Containment Techniques: Material is a paste and as such will not flow.				
Spill/Leak Clean-up Procedures and Equipment: Wear protective clothing and scoop up bulk material and place in a labeled plastic or metal container.				
Avoid gross skin contact to minimize the possibility of contact dermatitis to susceptible persons. Ensure adequate ventilation.				
Evacuation Procedures: Not Applicable Special Instructions: Not Applicable Reporting Requirements: Not Applicable				

7. Handling and Storage

Handling Practices and Warnings: Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals.

Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store in a dry area. Protect from exposure to direct light. Store away from food and beverages.

8. Exposure Control / Personal Protection









Occupational Exposure Limits: Not Applicable				
Engineering Controls: Not	Applicable			
Individual Protection Measures	Personal Protective Equipment for Normal Use	Personal Protective Equipment for Emergencies		
Eye/Face	Safety Glasses Not Applicable			
Skin	The glove material has to be impermeable and resistant to the product.	Not Applicable		
Inhalation	Not Required	Not Applicable		
Body Protection	Protective work clothing	Not Applicable		

9. Physical and Chemical Characteristics

Appearance: Various shades of viscous paste.		Odor: Characteristic sweet acrylic ester odor.	
Normal Physical State: Very High Viscosity Liquid (Paste)		Melting Point: Not Applicable	
Specific Gravity: 1.9 g/cm ³	Solubility in Water: Not soluble	pH: Not Applicable	
Vapor Pressure (mm Hg): Not Applicable Vapor Density (AIR=1): Not Applicable		Evaporation Rate (Butyl Acetate =1): Not Applicable	
Flashpoint Method: Not Applicable	Flammable (Explosive) Limits in Air	Autoignition Temperature: Not Applicable,	
LEL: Not Applicable UEL: Not Applicable		Product will not autoignite.	
Other: Not Applicable			

10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): Strong Oxidizing materials.		
Hazardous Products Produced During Decomposition: No dangerous decomposition products known if used according to Directions for Use.		
Hazardous Polymerization: May Occur May Not Occur Conditions to Avoid: None known		
Stability? ☑Stable ☐Unstable Conditions to Avoid: None known		

11.Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data:

Product is an irritant to the skin and mucous membranes. The unpolymerized product may be an irritant to the skin in susceptible persons. On the eye the product has an irritating effect. Sensitization: Repeated or prolonged contact with the unpolymerized material may cause sensitization for persons allergic to acrylates and methacrylates. This product shows the following dangers according to internally approved calculation methods for composite materials: Irritant.

Emergency Overview Material is irritating to eyes, respiratory system and skin.

Emergency Overview Material is inflating to eyes, respiratory system and skin.					
Routes of		Single, Repeated, or	Severity (Mild,	Acute and Chronic Health Effect(s)	
Exposure	Signs and Symptoms	Lifetime Exposure	Moderate, Severe)		Target Organ(s)
Eye	Material can cause irritation.	Single	Moderate	Irritation and possible corneal damage	Not Applicable
Skin	Material may be an irritant	Single & Repeated	Moderate	Irritation or possible allergic response. Severe allergic response may result in breathing difficulties.	Not Applicable
Inhalation	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Ingestion	Material is probably not harmful if swallowed	Not Applicable	Mild	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Medical Conditions Aggravated by Exposure Open sores and wounds of the skin. Individuals with known sensitivity to methacrylates, acrylates, or urethane dimethacrylate resin used in Dental restorative products.

Carcinogenicity	NTP?: Not listed	IARC monographs?: Not listed	OSHA regulated?: No All components of this product are in	
compliance with the	e inventory listing Requiren	nents of the U.S. Toxic Substances Cont	rol Act (TSCA) Chemical Substance Inventory.	
Potential Environmental Effects Do not allow to enter sewers/ surface or ground water.				
NEPA Hazard Classification Ratings (Scale 0-4) Health = 1. Fire = 0. Reactivity = 0				

12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard class1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water streams or sewage system.

13.Disposal Considerations

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

Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations

Properties (Physical/Chemical) Affecting Disposal: Dispose of material as solid waste in a closed container.

14.Transport Information

Regulated for Shipping: No. Not Regulated	DOT Shipping Name: Not Regulated	Packing Group: Not Applicable
Do Changes in Quantities, packaging, or shipment	DOT Hazard Class: Not Applicable	UN Number: Not Applicable
method change product classification? No		

15. Regulatory Information

This product has been classified in accordance with the hazard criteria of the Globally Harmonized System of Classification and Labeling of Chemicals and the SDS contains all of the information required by the Canadian Controlled Products Regulations.

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.

International Regulations: Canadian Environmental Protection Act:

This product is a medical device and not subject to chemical notification requirements.

European Community Labeling: Not a dangerous preparation.

European Inventory of New and Existing Chemicals Substances (EINECS):

This product is a medical device and not subject to chemical notification requirements.

Other: Not Applicable

16.Other Information

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex.

All components are synthetically produced; none are derived from animal products.

The information contained herein is accurate to the best of our knowledge.

Dentsply/Caulk makes no warranty of any kind, express or implied, concerning the safe use of this material.