

DENTSPLY/International
DENTSPLY/Caulk
Material Safety Data Sheet

505502

1. Product and Company Identification	
Product Name JELTRATE® PLUS Alginate Impression Material	MSDS Code Number 505502
Trade Name & Synonyms JELTRATE® PLUS Alginate Impression Material	Date of Last Revision 07/25/07
Chemical Name Alginate Impression Material	Manufacturer DENTSPLY/Caulk
C.A.S. Number N. A.	Address 38 West Clarke Avenue Milford DE 19963-1805 http://www.caulk.com
Grades or Minor Variant Identities Fast Set and Regular Set	Information Telephone Number (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)
Product Use (for Canada) Dental Impression Material	Emergency Telephone Number (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)

2. Composition Of Ingredients

Hazardous Components	C.A.S. Number	Exposure Limits	%
Silicon Dioxide -Crystalline - Cristobalite	14464-46-1	0.05 mg/M ³	< than 50
Silicon Dioxide - Crystalline -Quartz	14808-60-7	0.05 mg/M ³	< than 5
Silicon Dioxide – Amorphous - Diatomaceous Earth	68855-54-9	0.1 mg/M ³	< than 30
Calcium Sulfate	10101-41-4	10 mg/M ³	< than 20
Magnesium Oxide	1309-48-4	10 mg/M ³	< than 7
Tetrasodium Pyrophosphate	7722-88-5	5 mg/M ³	< than 3

Other Information: Fast Set Product contains D & C Red # 30 Aluminum Lake as the colorant. Regular Set Product contains synthetic Yellow Iron Oxide as the colorant. The coating agent is an organic glycol compound. The antibacterial additive is a quaternary ammonium compound.

3. Hazard Identification

Emergency Overview: Inhalation of crystalline silica has been classified by IARC as carcinogenic for humans (Group 1). Inhalation of crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica. Respirable dust from this product may contain up to 50 % crystalline silica (Cristobalite) and up to 4% crystalline silica (Quartz). As such, it represents a risk to the respiratory system. Long term, unprotected exposure to dust levels in excess of the TLV or PEL may cause lung disease (silicosis). This product has been coated with an organic glycol, which prevents the product from dusting during use.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	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.	Not Applicable
Inhalation	Transitory upper respiratory irritation or eye irritation.	Single & Repeated	Moderate	Irritation and soreness in throat and nose. In extreme exposures some congestion may occur. Inhalation of crystalline silica has been classified by IARC as carcinogenic for humans (Group 1). Inhalation of crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica. Respirable dust from this product may contain up to 52 % free crystalline silica (Cristobalite) and up to 4% crystalline silica (Quartz). As such it represents a risk to the respiratory system. Long term, unprotected exposure to dust levels in excess of the TLV or PEL may cause lung disease (silicosis).	Lung
Ingestion	Material is probably not harmful if swallowed	Not Applicable	Mild	Low order of toxicity is expected when material is ingested.	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.

Carcinogenicity NTP?: Not listed IARC monographs?: Yes Group 1 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.

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

NFPA Hazard Classification Ratings (Scale 0-4), Health = 2, Fire = 0, Reactivity = 0

DENTSPLY/International
DENTSPLY/Caulk
Material Safety Data Sheet

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	Irritation and soreness in throat and nose. In extreme exposures some congestion may occur. Inhalation of crystalline silica has been classified by IARC as carcinogenic for humans (Group 1). Inhalation of crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica. Respirable dust from this product may contain up to 52 % free crystalline silica (Cristobalite) and up to 4% crystalline silica (Quartz). As such it represents a risk to the respiratory system. Long term, unprotected exposure to dust levels in excess of the TLV or PEL may cause lung disease (silicosis). This product has been coated with an organic glycol, which prevents the product from dusting during use.
Ingestion	If symptoms persist consult physician	Not Applicable	Low order of toxicity is expected when material is ingested.
Other	Not Applicable	Not Applicable	Not Applicable

Note to Physicians (Treating, Testing and Monitoring): Not Applicable

5. Fire and Explosion Data

Flashpoint Method: Not Applicable	Flammable (Explosive) Limits in Air LEL: Not Applicable UEL: Not Applicable	Autoignition Temperature: Not Applicable.	Other: Not Applicable	
Flame Propagation or Burning Rate (for Solids): Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: Not Applicable		
Extinguishing Media: Not Applicable		Extinguishing Media to Avoid: Water with full jet.		
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices.				
Unusual Fire and Explosion Hazards: In common with most inorganic / organic materials, this product should be treated as a combustible dust in the finely divided and suspended state. No dangerous decomposition products known. - Product does not present an explosion hazard.				

6. Accidental Release Measures

Containment Techniques: Material is a dry fluffy powder, which is colored pale yellow or pink. Store only in the original package. Keep package tightly sealed to minimize dust generation and accumulation. The avoidance of any air contaminant is always a recommended practice. Adherence to work place ventilation standards is an assurance of general personnel health and comfort

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 drying out the skin. Ensure adequate ventilation, by either natural or mechanical means to keep dust level below PEL.
--

Evacuation Procedures: N. A. Special Instructions: N. A. Reporting Requirements: N. A.

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 in a cool dry area. Store away from food and beverages. Minimize dust generation and accumulation. Avoid breathing dust and contact with eyes. Return cap to canisters immediately. This product has been coated with an organic glycol, to preventing dusting during use. Close pouches immediately after use. Continue to follow all MSDS/label warnings when handling empty containers. Observe normal warehouse handling procedures. The avoidance of any air contaminant is always a recommended practice. Adherence to work place ventilation standards is an assurance of general personnel health and comfort.

8. Exposure Control / Personal Protection

Ventilation: Ensure adequate ventilation, by either natural or mechanical means to keep dust level below PEL.	Other Engineering Controls: N. A.
Routes of Entry	Personal Protective Equipment (PPE) for Normal Use
Eye/Face	Safety Glasses
Skin	The glove material has to be impermeable and resistant to the product.
Inhalation	Recommended NIOSH approved nuisance dust mask. <10X PEL, use 3M 9900; <100X PEL, use MSA Ultra-Twin with H filter; <200X PEL, use MSA 01-00-06 with type C supplied air unit (continuous flow mode); or equivalent. Use sufficient natural or mechanical ventilation to keep dust level below PEL.
Body Protection	Protective work clothing such as lab coat.
General Hygiene Considerations and Work Practices: Avoid dusting when in use. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin. Do not eat, drink or smoke when using.	
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable	
Other Protective Measures and Equipment: Not Applicable	

DENTSPLY/International
DENTSPLY/Caulk
Material Safety Data Sheet

9. Physical and Chemical Characteristics

Appearance: Dry fluffy powder. May be colored pale yellow or pink.	Odor: Spearmint odor.
Normal Physical State: Dry fluffy powder.	Melting Point: Not Applicable
Specific Gravity: 0.3 g/cm ³	Solubility in Water: Partially soluble
Vapor Pressure (mm Hg): Not Applicable	pH: Not Applicable
Other: Not Applicable	Vapor Density (AIR=1): Not Applicable
	Evaporation Rate (Butyl Acetate =1): Not Applicable

10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): Hydrofluoric Acid.	
Hazardous Products Produced During Decomposition: No dangerous decomposition products known if used according to Directions for Use. (DFU).	
Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur	Conditions to Avoid: None known
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid: None known

11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: Inhalation of crystalline silica has been classified by IARC as carcinogenic for humans (Group 1). Inhalation of crystalline silica is also a known cause of silicosis, a non-cancerous lung disease caused by excessive exposure to crystalline silica. Respirable dust from this product may contain up to 52 % free crystalline silica (Cristobalite). As such it represents a risk to the respiratory system. Long term, unprotected exposure to dust levels in excess of the TLV or PEL may cause lung disease (silicosis). The dry product may irritate the skin by drying it out.
--

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: Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations. Vacuum clean dust with equipment fitted with a HEPA filter. Use dust suppression such as water if sweeping is necessary. Sweep up spilled material and place in closed containers for disposal.
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 method change product classification? No	DOT Hazard Class: Not Applicable	UN Number: Not Applicable

15. Regulatory Information

U.S. Federal Regulations: <u>CERCLA 103 Reportable Quantity:</u> 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: Warning: This product contains silica, crystalline (airborne particles of respirable size) which is known by the State of California to cause cancer.
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.
