

**R&R®**  
**DENTSPLY®**

**Ransom & Randolph**

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**MATERIAL SAFETY DATA SHEET**

<b>FORM NUMBER:</b> 243	<b>ISSUE DATE:</b> 03/99	<b>REVISED DATE:</b> 05/03
<b>PRODUCT TRADE NAME:</b> *Tuff-Stone, *Master Model, *Dental Stone, Orthodontic Stone & Plaster, Dental Plasters, Durastone white and buff, Blue Marble, Die Stone		

**SECTION I - GENERAL INFORMATION**

<b>Part (Item) Number</b>	Calcium Sulfate
<b>Chemical Name</b>	
<b>Synonyms</b>	
<b>DENTSPLY Contact</b>	
<b>Formula</b>	CASO <sub>4</sub> .½H <sub>2</sub> O
<b>Chemical Family</b>	

**SECTION II - PRODUCT INGREDIENTS**

Chemical Name (Ingredients)	CAS #	%	TLV mg/m <sup>3</sup>	OSHA PEL mg/m <sup>3</sup>
Calcium Sulfate	7778-18-9	<9	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup>
*Chromium oxide (III)	<0.3%		½ mg/m <sup>3</sup> (as Cr)	1 mg/m <sup>3</sup>
*Green pigmented products only.				
			* Respirable Dust **Total Dust	

**SECTION III - PHYSICAL PROPERTIES**

<b>Boiling Point</b>	N/A	<b>Specific Gravity</b>	2.4
<b>Vapor Pressure</b>	N/A	<b>pH</b>	6 to 8
<b>Vapor Density</b>	N/A	<b>Evaporation Rate</b>	N/A
<b>Critical Temperature</b>	N/A	<b>Viscosity</b>	N/A
<b>Decomposition Temperature</b>	N/A	<b>% Volatile by Volume</b>	N/A
<b>Melting/Freezing Point</b>	1450°C – CaSO <sub>4</sub> Decomposes	<b>Magnetism</b>	N/A
<b>Solubility in Water</b>	0.2%	<b>Autoignition Temperature</b>	N/A
<b>Critical Pressure</b>	N/A	<b>Corrosion Rate</b>	N/A
<b>Permeable Exposure Limit</b>		<b>Molecular Weight</b>	N/A
<b>Appearance and Odor</b>	Ivory, White, Blue, Lavender, Yellow, Pink, Green, or Tan powder with a bland odor		

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

<b>Flash Point (Method Used)</b>	N/A		
<b>Flammable (Explosion) Limits:</b>	<b>LEL:</b> N/A	<b>UEL:</b> N/A	
<b>Extinguishing Media -</b>	<b>Water Spray:</b> Y	<b>Carbon Dioxide:</b> Y	<b>Foam:</b> Y
	<b>Dry Chemical:</b> Y	<b>Other:</b>	
<b>Special Fire Fighting Procedures and Equipment</b>		<b>Avoid eye and skin contact:</b> Y	
	<b>Do not breathe fumes</b> : Y	<b>Other:</b> Do not inhale dust	
<b>Unusual Fire and Explosion Hazards:</b> None			

**SECTION V - HEALTH HAZARD DATA**

<b>Effects of Over Exposure:</b>	Avoid contact with eyes. Dust may be irritating. Inhalation of dust may result in irreversible lung damage.
<b>Emergency and First Aid Procedures.</b>	In case of eye contact flush with flowing water at least 15 minutes.
<b>Eyes:</b>	Flush with water. If irritation persists, see a physician.
<b>Skin:</b>	Wash with soap and water.
<b>Inhalation:</b>	Move exposed individual to fresh air. Call a physician.
<b>Ingestion:</b>	Call a physician.
<b>NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS!</b>	
<b>Carcinogenicity:</b>	Not listed by NTP or IARC, and not regulated by OSHA.
<b>Medical Conditions Aggravated:</b>	None known.
<b>Labels:</b>	None required.
<b>Transportation Regulations:</b>	No D.O.T. label required.

**SECTION VI - REACTIVITY DATA**

<b>Stability:</b>	<b>Stable:</b> Y	<b>Unstable:</b> N
<b>Conditions to avoid (Stability):</b>	None	
<b>Incompatibility (Materials to Avoid):</b>	None	
<b>Hazardous Decomposition Products:</b>	When heated to decomposition may emit SO <sub>x</sub> .	
<b>Hazardous Polymerization:</b>	<b>Will Occur:</b> N	<b>Will Not Occur:</b> Y
<b>Conditions to Avoid (Polymerization):</b>	N/A	

**SECTION VII - PRECAUTIONS FOR HANDLING AND USE**

<b>Handling and Storage Precautions:</b>	Normal warehouse handling and storage.
<b>Other Precautions:</b>	For industrial use only. Read technical data bulletin about this product prior to use.
<b>Steps to be Taken in Case Material is Released or Spilled:</b>	Wet down with sufficient water to eliminate dust. Carefully sweep up and place in a suitable container for disposal. Avoid creating a dusty atmosphere.
<b>Waste Disposal Procedure:</b>	Dispose of material as solid waste in a closed container. Follow all chemical pollution control regulations.
<b>Neutralizing Agent:</b>	N/A

**SECTION VIII - OCCUPATIONAL PROTECTION MEASURES**

<b>Respirator Protection:</b>	Use NIOSH approved respirator for dust and particulates, N95 filter classification (e.g. 3M 8210).	
<b>Ventilation-</b>	<b>Local Exhaust:</b> Recommended	<b>Mechanical (General):</b> Required
	<b>Special:</b> N/A	<b>Other:</b> N/A
<b>Protective Gloves:</b>	Y	
<b>Eye Protection:</b>	Not normally necessary but recommended. Y	
	<b>Chemical Workers Goggles:</b> Y	<b>Other:</b>
<b>Other Personal Protective Equipment:</b>	Eye wash and shower.	

**SECTION IX - TRANSPORTATION INFORMATION**

<b>U.S. DOT Hazard Classification</b>	
<b>Proper Shipping Name:</b> Not regulated	<b>Hazard Class/Packing Group:</b> N/A
<b>Technical Name:</b> N/A	<b>Labels Required:</b> None
<b>UN Number:</b> N/A	<b>DOT Packaging Requirements:</b> N/A
<b>Exceptions:</b>	

**SECTION X - ECOLOGICAL INFORMATION**

No ecotoxicity data is available. This product is not expected to present an environmental hazard.

**SECTION XI - OTHER INFORMATION**

<b>NFPA Hazard Rating</b>	<b>Health:</b> 1	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>HMIS Hazard Rating</b>	<b>Health:</b> 1	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>Personal Protection:</b> Use NIOSH/OSHA approved respirator.			

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