

Estes' PermaColor Quartz Granules

Product Data Sheet

REV 1 @ 2006

Grade: Broadcast Medium, Broadcast Fine, Trowel-Rite,
Super Trowel-Rite

General Data		
Property	Measuring Standards	Value
Hardness	Moh's Hardness Scale	6.5-7
Bulk Density	ASTM C29/C29M-97 (2003)	90-100 Lbs./ Cu. Ft.
Specific Gravity	ASTM C128-01e1	2.65

Composition (Typical)	
Material	% Weight
Silica Sand	97.5
Resin	2.0
Various colorants	0.5

Chemical Analysis (Typical base mineral)				
SiO ₂	Fe ₂	Al ₂ O ₃	CaO & MgO	Loss on Ignition
99.808%	0.016%	0.042%	0.200%	0.100

Sieve Analysis (ASTM D451-91 (2002))							
Mesh (% Retained)	16	20	30	40	50	70	100
Retained- BC Fine			0.3	6.1	27.2	40.0	22.4
Retained- BC Med		9.0	12.4	54.0	22.0	1.9	0.7
Retained- Trowel-Rite		41.0	54.0	4.0	<1	<1	
Retained- Super Trowel-Rite	51.0	47.0	1.0	<1	<1		

PermaColor Quartz Granules are available in **sixteen** standard colors:

Teal	Yellow	OSHA Yellow	Buff
Teak	Chocolate	Tan	Blue
Light Beige	Gray	Black	Blue Gray
Green	Camel	Red	White

Estes' PermaColor Quartz Granules consist of quality crystalline quartz colored with a high performance surface coating. They are designed for use in a variety of resin systems, including epoxies, urethanes and acrylics.

MATERIAL SAFETY DATA SHEET

SECTION I IDENTIFICATION

CLIFFORD W. ESTES CO., INC
40 Vreeland Ave. Ste 104
Totowa, NJ 07512

DATE **January 2005**

PHONE: 973-890-2220

PRODUCT BRAND NAME **ULTRA-STONE, ART SAND, ULTRA-REEF, MAGIC SAND
IN A VARIETY OF COLORS**

PRODUCT IDENTIFICATION **ULTRA STONE**

CHEMICAL NAME **SILICON DIOXIDE (SiO₂)**

DEPARTMENT OF TRANSPORTATION **SAND, GRAVEL, NOIBN**

CHEMICAL FAMILY **SILICA SAND**

SECTION II HAZARDOUS INGREDIENTS

CHEMICAL NAME	% WT	C.A.S. #	OSHA (PEL)	ACGIH (TLV)
SILICA SAND *	96.0	14808-60-7		TLV .1 mg/m ³
RESIN, PIGMENTS	3.5-4	NON-HAZARDOUS		N/A
TONER PIGMENTS**	1	NON-HAZARDOUS		N/A

* No Respirable Dust is present in the finished product due to the coating and subsequent surface treatment which captures and confines all dust to the particles. See Section V111 for further information

** All materials used in the manufacture of colored aggregates utilize colorants and resins of FDA standards for both the food packaging and Toy industry and are considered non-hazardous

SECTION III PHYSICAL DATA

BOILING POINT: NONE

VAPOR PRESSURE: NONE

VAPOR DENSITY: NONE

% VOLATILES: < 1%

APPEARANCE: SAND OR AGGREGATE, VARIOUS COLORS

SPECIFIC GRAVITY 2.65

PH: INERT

EVAPORATION RATE: N/A

SOLUBILITY IN H₂O: INSOLUBLE

SECTION IV FIRE AND EXPLOSION HAZARD

FLASH POINT: NON-FLAMMABLE

FLAMMABLE LIMITS: LEL- N/A, UEL -N/A

UNUSUAL FIRE & EXPLOSION HAZARDS: Products of combustion may include irritating gases.

SECTION V HEALTH AND SAFETY

THRESHOLD LIMIT VALUE : (SEE PAGE ONE)

EFFECTS OF OVER EXPOSURE: Prolonged inhalation of mineral dust may cause delayed lung injury.

EMERGENCY & FIRST AID PROCEDURES: -EYES, Remove in the same manner as one would remove any foreign particle.

SECTION VI REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Dissolves in hydrofluoric acid

CONDITIONS TO AVOID: None Known

SECTION VII SPILL/LEAK PROCEDURES

1. Clean up using dustless procedures. Use water and/or vacuum.
2. WASTE DISPOSAL: Dispose using locally approved waste disposal sites.

SECTION VIII SPECIAL PROTECTION

Use of this product under normal and recommended conditions and specifications will pose no known hazards. However, if surfaces using this product are subjected to sanding or grinding as might occur for maintenance purposes, and such treatment produces respirable dust, then proper ventilation and breathing apparatus should be used. Under such conditions, NIOSH-BOM approved respirators should be worn.

GLOVES: Optional

EYE PROTECTION: Full eye zone goggles should be worn.

SECTION IX SPECIAL PRECAUTIONS

1. USE DUSTLESS PROCEDURES DURING HANDLING, STORAGE AND CLEAN-UP
2. PRACTICE GOOD HOUSEKEEPING. MAINTAIN VENTILATION. POST WARNING TO EMPLOYEES WHERE PRODUCT IS USED, STORED OR HANDLED.