

4128464123 CCC  
**MATERIAL SAFETY DATA SHEET**

SPEC. MSDS NUMBER DATE 10-30-85

5140

MSDS 1044 (3/85)

**PRODUCT IDENTIFICATION**

TRADE NAME Rutile	GENERIC NAME Rutile Ore
MANUFACTURER'S NAME Ceramic Color & Chemical Mfg. Co.	CAS NUMBER 134663-67-7
ADDRESS (STREET) 13th Street & 11th Avenue	PHONE NUMBER (EMERGENCY) 412-846-4000
CITY New Brighton, PA	CHEMICAL STRUCTURE TiO <sub>2</sub>
STATE	ZIP 15066

**I. PRODUCT INGREDIENTS**

CHEMICAL AND/OR COMMON NAME	CAS NUMBER	%	TLV/PEL
TiO <sub>2</sub> Titanium Dioxide	134663-67-7	97.0 Min	10mg/m <sub>3</sub>
SiO <sub>2</sub> Free Silica (Quartz)	1480-60-7	.95 Max	10mg/m <sub>3</sub>
ZrO <sub>2</sub> Zirconium Oxide	14940-68-2	1.0 Max	5mg/m <sub>3</sub>
Fe <sub>2</sub> O <sub>3</sub> Iron Oxide	1309-37-1	1.0 Max	5mg/m <sub>3</sub>
Al <sub>2</sub> O <sub>3</sub> Aluminum Oxide	1344-28-1	.5 Max	10mg/m <sub>3</sub>

**II. PHYSICAL DATA**

BOILING POINT Not Applicable	VAPOR PRESSURE Not Applicable	SPECIFIC GRAVITY 4.0 - 4.6	MELTING POINT 1640 C
SOLUBILITY IN WATER Insoluble	VAPOR DENSITY (AIR=1) Will not evaporate	PERCENT VOLATILE Not Volatile	EVAPORATION RATE Not Applicable
APPEARANCE AND ODOR			

**III. FIRE AND EXPLOSION DATA**

FLASH POINT Will not burn	FLAMMABLE LIMITS Not applicable	LEL N/A	UEL N/A
EXTINGUISHING MEDIA Not flammable	SPECIAL FIREFIGHTING PROCEDURES None, use whatever procedures are necessary for surrounding products		
UNUSUAL FIRE OR EXPLOSION HAZARDS Does not burn or explode.			

**IV. HEALTH HAZARD INFORMATION**

HAZARD BY ROUTES OF EXPOSURE (Indicate chronic and acute)

**INHALATION**  
Deposits on mucous membranes - nuisance dust.

**INGESTION**  
No adverse effects are seen in animals after ingestion.

**EYE**  
Irritant if particles lodge in eye, physical discomfort only.

**SKIN CONTACT/ABSORPTION**  
Solid particles will not absorb.

**SIGNS AND SYMPTOMS ASSOCIATED WITH EXPOSURE OVER TLV**  
No harmful effects are known to be caused by exposure of Titanium compounds above the published TLV limit.

**MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED**  
None known.

**ANY OF PART LISTED AS CARCINOGENS? (NTP, IARC, OSHA)**  
No part or ingredient listed as a carcinogen by IARC, NTP/ASHA or ACGIH

HEALTH HAZARD INFORMATION CONTINUED ON BACK