



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Char Catalyst 5066

Synonyms: Surface Modified Clay

---

### MANUFACTURER:

Unitex Chemical Corporation  
520 Broome Road  
P.O. Box 16344  
Greensboro, NC 27406

### EMERGENCY TELEPHONE NUMBERS:

Emergency Telephone Number: CHEMTREC 1 (800) 424-9300  
International 1 (703) 527-3887  
Telephone Number for Information:  
(336) 378-0965 (Monday - Friday 8:00 a.m. - 5:00 p.m.)

---

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>% (optional)</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>CAS NO.</u>
Montmorillonite clay	60-70%			1318-93-0
Dimethyl Dialkyl (C14-18) Ammonium	30-40%			68002-59-5
Crystalline Quartz	<2%			14808-60-07
Respirable Crystalline Quartz	<.5%	0.1mg/m <sup>3</sup>	0.1mg/m <sup>3</sup> TWA	
Nuisance Dust (Respirable)		5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	
Total Dust		15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	

\* **WARNING:** This product may contain a small amount of crystalline silica, which may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing the dust. Use NIOSH/MSHA approved respirator where TLV for crystalline silica (quartz) may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (volume 68, 1997) concludes that crystalline silica is carcinogenic to humans in the form of quartz. IARC classification 1.

The small quantities of crystalline silica (Quartz) found in this product are, under normal conditions, naturally coated with an unremoveable layer of amorphous silica and/or bentonite clay. IARC (vol. 68, 1997, PP 191-192) has stated that crystalline silica (quartz) can differ in toxicity depending on the minerals with which it is combined, citing studies in IARC (vol. 42, 1987, P. 86) which stated that the toxic effect of crystalline silica (quartz) is reduced by the "protective effect....due mainly to clay minerals..."

National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m<sup>3</sup>) as determined by a full shift sample up to a 10 hour working day, 40 hours per week. See: 1974 NIOSH criteria for a recommended Standard for Occupational Exposure to Crystalline Silica should be consulted for more detailed information.

**Product Name: Char Catalyst 5066**

---

### 3. HAZARDS IDENTIFICATION

Emergency Overview:    **Route(s) of Entry:**    **Inhalation? Yes**    **Skin? No**    **Ingestion? No**

Potential Health Effects (Acute and Chronic):

**Inhalation:** Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects:

**Silicosis:** Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with silicosis are predisposed to develop tuberculosis.

**Cancer Status:** The International Agency for Research on Cancer has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans. (group 1 – carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibers (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program classifies respirable crystalline silica as "reasonably anticipated to be a carcinogen". For further information See: "Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, Page 761-765, 1997.

Other Data with Possible Relevance to Human Health:

The small quantities of crystalline silica (quartz) found in this product are, under normal conditions, naturally coated with an unremovable layer of amorphous silica and/or bentonite clay. IARC (vol. 68, 1997, pg 191-192) has stated that crystalline silica (quartz) can differ in toxicity depending on the minerals with which it is combined, citing studies in IARC (Vol. 42, 1987, pg. 86) which stated that the toxic effect of crystalline silica (quartz) is reduced by the "protective effect.... Due mainly to clay minerals...".

Carcinogenicity:    NTP? No    IARC Monographs? No    OSHA Regulated? No

Medical Conditions Generally Aggravated by Exposure:

Individuals with respiratory disease, including but not limited to, asthma and bronchitis, or subject to eye irritation should not be exposed to respirable crystalline silica (quartz) dust.

---

**Product Name: Char Catalyst 5066**

---

#### **4. FIRST AID MEASURES**

Inhalation: Gross inhalation of dust, remove to fresh air, give oxygen or artificial respiration if necessary, get medical attention.

Eye Contact: Flush eyes for at least 15 minutes and get medical attention if needed.

Skin Contact: Wash with soap and water for good hygiene.

Ingestion: If patient is conscious, give several glasses of water for diluent effect and seek medical attention. Do not induce vomiting. Do not give an unconscious person anything by mouth.

---

#### **5. FIRE FIGHTING MEASURES**

Flash Point: Not applicable

Flammable Limits (% by Volume): Not applicable

Extinguishing Media: Not applicable

Fire Fighting Instructions: Inorganic Mineral/Non-Flammable

Hazardous Combustion Products: Not applicable

---

#### **6. ACCIDENTAL RELEASE MEASURES**

Land Spill: Vacuum if possible to avoid generating airborne dust. Avoid breathing dust. Wear an approved respirator. Avoid adding water, the product will become slippery when wet.

Waste Disposal: Follow federal state and local regulations for solid waste.

---

#### **7. HANDLING AND STORAGE**

Storage Temperature: Ambient                      Storage Pressure: Ambient

General: Use precautions for flammable dust including avoidance of dust generation and the use of adequate dust collection systems. Use properly grounded electrical equipment to prevent static discharge. Keep away from open flame, heat or other ignition sources. Avoid breathing dust, use NIOSH/MSHA approved respirator.

---

**Product Name: Char Catalyst 5066**

---

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation is recommended.

Personal Protection: Eye protection recommended; however no special clothing or gloves are required.

Respirator: Use OSHA standard 1910.134 or ANZI Z88.2-1980 approved respirators.

Protective Clothing: Eye protection recommended

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure	: <u>Not applicable</u>	Vapor Density (Air = 1)	: <u>Not applicable</u>
Specific Gravity	: <u>Approx. 1.4</u>	Evaporation Rate	: <u>Not applicable</u>
Solubility in Water	: <u>Negligible</u>	Melting Point:	: <u>Not applicable</u>
Boiling Point	: <u>Not applicable</u>	Appearance	: <u>Soft, off white powder</u>
Odor	: <u>odorless</u>		

---

## 10. STABILITY AND REACTIVITY

General: Stable under normal warehousing, handling, and use conditions.

Incompatible Materials and Conditions to Avoid: None Known.

Hazardous Decomposition: None Known.

Hazardous Polymerization: Will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

See section 3.

---

## 12. ECOLOGICAL INFORMATION

Not established.

---

## 13. DISPOSAL CONSIDERATIONS

This product is registered by TSCA, DSL, EINECS, ECL, ENCS, PICCS, and AICS. Dispose in accordance with all local, state, and federal regulations

---

**Product Name: Char Catalyst 5066**

---

#### **14. TRANSPORT INFORMATION**

Not regulated by DOT.

---

#### **15. REGULATORY INFORMATION**

SARA 311/312: Hazard categories for SARA Section 311/312 Reporting Chronic Health

SARA 313: This product contains the following chemicals subject to annual release reporting Requirements under SARA section 313 (40 CFR 372): None

---

**California Proposition 65:** This product contains the following substances known to the state of California to cause cancer and/or reproductive harm: This product contains crystalline silica (respirable); however, the user should note that the small quantities of crystalline silica (quartz) found in the product are, under normal conditions, naturally coated with an unremovable layer of amorphous silica and/or bentonite clay. IARC (Vol. 68, 1997, pg. 191-192) has stated that crystalline silica (quartz) can differ in toxicity depending on the minerals with which it is combined, citing studies in IARC (vol. 42, 1987, pg 86) which stated that the toxic effect of crystalline silica (quartz is reduced by the "protective effect....due mainly to clay minerals...".

**Toxic Substance Control Act:** All of the components of this product are listed on the EPA TSCA Inventory or are exempt from notification requirements.

**European Inventory of Commercial Chemical Substances:** All the components of this product are listed on the EINECS Inventory or exempt from notification requirement. (The EINECS number for Quartz: 231-545-5.

**Canadian Environmental Protection Act:** All the components of this product are listed on the Canadian Domestic Substances List or exempt from notification requirements.

**Japan MITI:** All the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

**Australian Inventory of Chemical Substances:** All the components of the product are listed on the AICS Inventory or exempt from notification requirements.

**Canadian WHMIS Classification:** Class D, Division 2, Subdivision A (Very Toxic Material causing other Toxic Effects)

**European Community Labeling Classification:** Harmful (Xn)

**European Community Risk and Safety Phrases:** R48-20 danger of serious damage to health by Prolonged exposure through inhalation  
S-22 do not breathe dust

**Product Name: Char Catalyst 5066**

---

**NF-PA Hazard Rating: Health: 1 Fire: 0 Reactivity: 0**

**NMIS Hazard Rating: Health: \* Fire: 0 Reactivity: 0**

\* **Warning:** Chronic health effect possible – inhalation of silica dust may cause lung injury/disease (silicosis). Take appropriate measures to avoid breathing dust. See Section II

References: Registry for Toxic Effects of Chemical Substances (TRECS), 1995  
Patty's Industrial Hygiene and Toxicology  
NTP Seventh Annual Report on Carcinogens, 1994  
IARC Monograph Volume 68, Silica, Some Silicates and Organic Fibers, 1997

---

## 16. OTHER INFORMATION

MSDS Status: Update to ANZI Z 400.1-1993 Format

Revision Summary: New