



Safety Data Sheet

Section 1: Product and Company Information

Product Name:

Boremaster®

Generic Name

Carbon. Same category as coal, graphite, coke, Lignite and other soft or hard carbon materials

General Use:

HT/HP filtrate loss control agent and Shale Stabilizer
For water & oil base drilling fluids

Contact information:

Setac Corporation
501 Harwell Street
Lafayette LA 70503
337-278-2325 Phone
setac@bellsouth.net email
<http://www.setac.com> Website

Section 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Health:**

Specific Target Organ Toxicity (Single Exposure), Category 3

Physical:

Combustible Dust

GHS LABEL ELEMENTS

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H002: May form combustible dust concentrations in air.

H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)**Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P271: Use only outdoors or in a well-ventilated area.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Black free flowing powder.





IMMEDIATE CONCERNS: HAZARD DESCRIPTION / WARNING

INFORMATION SUMMARY - Caution. May cause eye and respiratory tract irritation. Avoid contact with eyes and clothing. Avoid breathing airborne product. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. This product is a nuisance dust. Please read entire contents of Section 2 of this Safety Data Sheet (SDS) for details.

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause eye irritation.

SKIN: This product is unlikely to cause skin irritation or injury.

INGESTION: This product is unlikely to cause harmful effects from ingestion.

INHALATION: May be irritating to the respiratory tract if inhaled. Excessive concentrations of a nuisance dust may cause coughing, sneezing and nasal irritation.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Not Established.

TERATOGENIC EFFECTS: None Known.

CARCINOGENICITY: The NTP and IARC lists crystalline silica (quartz) as a "human carcinogen." See Section 11 of this SDS for more details.

MUTAGENICITY: None Known.

MEDICAL CONDITIONS AGGRAVATED: Particulate inhalation may lead to pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma. Dermatitis and asthma may result from short contact periods.

ROUTES OF ENTRY: Inhalation.

SENSITIZATION: Not Established.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	VOL.%	CAS
Proprietary Ingredients	Proprietary	Proprietary
Silica, Crystalline	0 - 0.2	14808-60-7

COMMENTS: The proprietary ingredients of this product are not considered hazardous per 29 CFR 1910.1200. As such, the specific chemical formulation of this material is being withheld as a trade secret and will be provided to a health professional when requested and/or to a physician or nurse in a medical emergency through utilization of the telephone number(s) listed in Section 1 of this SDS. This product may contain crystalline silica (quartz). Refer to Section 2 and Section 11 of this SDS for additional information.

Section 4. FIRST AID MEASURES

EYES: Immediately flush with large amounts of water, holding eyelids open, for at least 20 minutes. Repeat if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance if irritation persists.

SKIN: Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops or persists.



INGESTION: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Slowly give 1-2 glasses of water and seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION: Move victim to fresh air. Call 911, emergency medical service, or Emergency Phone Numbers(s) provided in Section 1 of this SDS. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: May cause irritation with eye contact.

CHRONIC EFFECTS: Excessive inhalation or eye exposure over long periods may cause harmful irritation.

NOTES TO PHYSICIAN: Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First Aid Responders are advised to wear personal protective equipment as found in Section 8 of this SDS.

Section 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

SMALL FIRE - Dry chemical, carbon dioxide or water spray.

LARGE FIRE - Water spray, fog and foam.

FIRE FIGHTING PROCEDURES: PROTECTIVE ACTIONS TO TAKE DURING FIRE FIGHTING - Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material. Persons involved in fire-fighting response involving this product and its containers/packaging should refer to Section 8 of this SDS for the proper selection of exposure controls and personal protective equipment.

FIRE FIGHTING EQUIPMENT: PRECAUTIONS FOR FIRE INVOLVING TANKS OR CAR/TRAILER LOADS - Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

FIRE EXPLOSION: This product may be combustible at high temperatures.

SENSITIVE TO STATIC DISCHARGE: This product may conduct electricity. May form mixtures with air.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides.

Section 6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: For emergency information and procedures to follow in the case of an accidental release, call the Emergency Telephone Number(s) listed in Section 1 of this SDS. Avoid generating and spreading of dust. Shovel into dry containers. Cover and move the containers. Wash away with water or vacuum with a high efficiency filter to recover and reuse the material. If product is contaminated, collect in suitable containers for disposal. Do not contaminate drainage or waterways. Repackage or recycle if possible.

LARGE SPILL: Use similar response procedures as indicated under Small Spill.

RELEASE NOTES: ENVIRONMENTAL PRECAUTIONS - Prevent entry into waterways, sewers, basements or confined areas. Inform the relevant authorities if the



product has caused environmental pollution (sewers, waterways, soil or air). Avoid allowing water runoff to contact spilled material. If sweeping of a contaminated area is necessary, use a dust suppressant agent, which does not react with the product. Contaminated surfaces will be extremely slippery.

SPECIAL PROTECTIVE EQUIPMENT: In case of dust generation, wear goggles and ensure adequate ventilation and/or use breathing apparatus. Dust in high concentrations may form explosive mixtures with air. Review Sections 5 and 7 of this SDS with personnel before starting any clean-up operations.

Section 7. HANDLING AND STORAGE

HANDLING: Dusts are subject to combustion or explosion upon contact with sparks, open flames or temperatures. Any potential of sparking or ignition should be moved prior to pulverizing or other process resulting in dust generation.

STORAGE: Keep in airtight container away from all heat sources. Store in a segregated and approved area. Store in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Keep container in a well-ventilated area. Store away from incompatible materials. Store in the original container or an approved alternative made from compatible material. Do not store in unlabeled containers. Treat empty containers in a similar fashion as residual product may exist. Use appropriate containment to avoid environmental contamination.

STORAGE TEMPERATURE: Store containers in a room with ambient temperature.

STORAGE PRESSURE: Containers should be stored in a room at ambient pressure.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

OSHA HAZARDOUS COMPONENTS (29CFR1910.1200)

EXPOSURE LIMITS

	<u>OSHA PEL</u>			<u>ACGIH TLV</u>	
	<u>TWA</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>
Proprietary Ingredients	<u>STEL</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>
	<u>TWA</u>	⁽¹⁾	⁽¹⁾	<u>N/E⁽²⁾</u>	<u>0.025⁽²⁾</u>
Silica, Crystalline	<u>STEL</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>	<u>N/E</u>



Footnotes:

1. Exposure limits of crystalline silica are established based on the percent of silica content according to the following OSHA equations:

Total Dust: $(30 \text{ mg/m}^3)/(\% \text{ SiO}_2 + 2)$

Respirable Dust: $(10 \text{ mg/m}^3) / (\% \text{ SiO}_2 + 2)$

2. In the absence of a national exposure limit, ACGIH recommends that a TWA of 0.100 mg/m³ be used.

ENGINEERING CONTROLS: Provide adequate general and local exhaust ventilation. Provide readily accessible eye wash stations and emergency showers. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Employees should be provided with and required to use safety goggles where there is any possibility of product coming in contact with eyes. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of contact lenses. Ensure that an eye wash station is operable and nearby.

SKIN: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. Remove contaminated clothing immediately, wash skin with soap and water, and launder clothing before reuse.

RESPIRATORY: Depending on airborne concentration, wear a NIOSH approved N95 half-face dust respirator.

WORK HYGIENIC PRACTICES: Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse. Shower after work using plenty of soap and water.

OTHER USE PRECAUTIONS: FIREFIGHTING AND OTHER IMMEDIATELY

DANGEROUS TO LIFE OR HEALTH CONDITIONS - A self-contained breathing apparatus (SCBA) with full face piece operated in a pressure-demand or other positive pressure mode is recommended for firefighting or other immediately dangerous to life and health conditions. A supplied-air respirator with full face piece and operated in pressure- demand or other positive pressure mode in combination with an auxiliary SCBA operated in pressure-demand or other positive pressure mode may also be used.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Odorless or no characteristic odor.

APPEARANCE: Black free flowing powder.

pH: 6.8-7.2

FLASH POINT: Not Established.

FLAMMABLE LIMITS: Not Established.

AUTOIGNITION TEMPERATURE: > 400°C (752°F)

VAPOR PRESSURE: Not Applicable.

VAPOR DENSITY: Not Applicable.

BOILING POINT: Not Applicable.

Date Revised: 5.14.2017



FREEZING POINT: Not Applicable.

SOLUBILITY IN WATER: Dispersible in oil and water and partially soluble in water.

EVAPORATION RATE: Not Applicable.

FLAMMABILITY: Refer to Section 2 and Section 5 of this SDS for classification and flammability characteristics.

Section 10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: This product is anticipated to be stable under normal ambient storage and handling conditions of temperature and pressure.

POLYMERIZATION: This product is not anticipated to cause hazardous reactions or polymerizations under normal ambient storage and handling conditions of temperature and pressure.

CONDITIONS TO AVOID: Avoid heat, sparks, open fire and oxidizing conditions. Dust explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

ACUTE

<u>Chemical Name</u>	<u>Oral LD₅₀</u> <u>(rat)</u>	<u>Dermal LD₅₀</u> <u>(rat)</u>	<u>Inhalation LC₅₀</u> <u>(rat)</u>
Proprietary Ingredients	N/E	N/E	N/E
Silica, Crystalline	500 mg/kg	Non-irritating to the Skin.	May cause respiratory irritation, acute, and/or chronic lung effects

NOTES: This product is not anticipated to be harmful but may cause respiratory irritation due to dust inhalation.

CHRONIC: This product is not anticipated to cause any health hazard for repeated or prolonged exposure.

CARCINOGENICITY

<u>Chemical Name</u>	<u>NTP Status</u>	<u>IARC Status</u>	<u>OSHA Status</u>	<u>Other</u>	<u>General Toxicity</u>
Silica, Crystalline	1	1	Carcinogen	Regulation EC) No 1272/2008 -Category 1A H350i: May cause cancer by inhalation	Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 199/45/EC

Date Revised: 5.14.2017

SENSITIZATION: Not Established.

NEUROTOXICITY: Not Established.

GENETIC EFFECTS: Not Established.

REPRODUCTIVE EFFECTS: Not Established.

TERATOGENIC EFFECTS: None Known.

MUTAGENICITY: None Known.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: MOBILITY IN SOIL POTENTIAL - Not Established.

ECOTOXICOLOGICAL INFORMATION:

TERRESTRIAL/MICROORGANISM TOXICITY –

ACUTE: Ecological data does not exist for this mixture.

CHRONIC: Ecological data does not exist for this mixture.

BIOACCUMULATION/ACCUMULATION: Ecological data does not exist for this mixture.

AQUATIC TOXICITY: This product is not expected to be harmful to aquatic life.

CHEMICAL FATE INFORMATION: PERSISTENCE & DEGRADABILITY - Not Established.

DISTRIBUTION: Do not discharge into or allow runoff to flow into sewers and natural waterways.

Contain spill material and dike for proper **SENSITIZATION:** Not Established.

NEUROTOXICITY: Not Established.

GENETIC EFFECTS: Not Established.

REPRODUCTIVE EFFECTS: Not Established.

TERATOGENIC EFFECTS: None Known.

MUTAGENICITY: None Known.

Section 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: MOBILITY IN SOIL POTENTIAL - Not Established.

ECOTOXICOLOGICAL INFORMATION:

TERRESTRIAL/MICROORGANISM TOXICITY –

ACUTE: Ecological data does not exist for this mixture.

CHRONIC: Ecological data does not exist for this mixture.

BIOACCUMULATION/ACCUMULATION: Ecological data does not exist for this mixture.

AQUATIC TOXICITY: This product is not expected to be harmful to aquatic life.

CHEMICAL FATE INFORMATION: PERSISTENCE & DEGRADABILITY - Not Established.

DISTRIBUTION: Do not discharge into or allow runoff to flow into sewers and natural waterways.

Contain spill material and dike for proper disposal.

GENERAL COMMENTS: Any other adverse environmental effects, such as environmental fate (exposure), ozone depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and global warming potential are indicated in this section if data exists. Otherwise, this data has not been established.

13. DISPOSAL CONSIDERATIONS



DISPOSAL METHOD: This product does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

PRODUCT DISPOSAL: Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that containers are empty by RCRA criteria prior to disposal in a permitted industrial landfill.

EMPTY CONTAINER: Empty containers may retain residues. All label precautions must be observed.

RCRA/EPA WASTE INFORMATION: Under the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal whether the product meets RCRA criteria for a hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

COMMENTS: Dispose of material in accordance with national, state, regional, and local regulations. Never discharge directly into sewers or surface water. Consult with environmental regulatory agencies for guidance on acceptable disposal practices for the product, in any form, and its containers/packaging.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated as a dangerous good.

U.S. CUSTOMS HARMONIZATION NUMBER: 2803.00.0050

RAIL AND ROAD (ADR/RID)

PROPER SHIPPING NAME: Not regulated as a dangerous good.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not regulated as a dangerous good.

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Not regulated as a dangerous good.

COMMENTS: This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate (acute) health hazard.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: None of the components are listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT) Chemical Name	CAS
Silica, Crystalline	14808-60-7

STATES WITH SPECIAL REQUIREMENTS

Setac

Chemical Name

Silica, Crystalline

Requirements

Idaho Air Pollutant
Massachusetts Hazardous Substance
Minnesota Hazardous Substance
Pennsylvania Hazardous Substance
Washington PELs for Air
Contaminants

CALIFORNIA PROPOSITION 65: This product may contain natural occurring Crystalline Quartz Silica. There is no known method to determine if mined material may contain Silica in a Respirable form. STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 CHEMICALS KNOWN TO THE STATE TO CAUSE CANCER OR REPRODUCTIVE TOXICITY March 27, 2015 list's Silica, crystalline (airborne particles of respirable size)

RCRA STATUS: Not a hazardous waste.

CARCINOGEN: This product is listed as a carcinogen under NTP, IARC, and OSHA.

CANADA WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

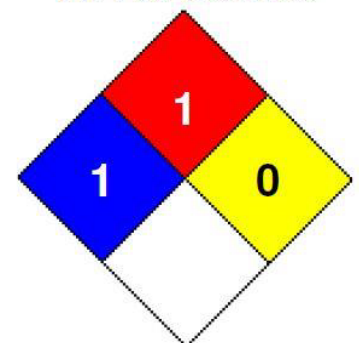
This product may contain crystalline silica. Crystalline silica is considered carcinogenic to humans. If Boremaster contains more than 0.1 % crystalline silica, then the product will fall within WHMIS class D2A by virtue of the untested mixtures criteria of the Controlled Products Regulations.

16. OTHER INFORMATION

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E

NFPA CODES



HMIS RATINGS NOTES: Please refer to Section 8 of this SDS for recommended personal protective equipment.

Date Revised: 5.14.2017



DATA SOURCES:

REFERENCES

ACGIH. 2014 Guide to Occupational Exposure Values. Cincinnati, OH. Signature Publications, 2014.
Forsberg, K. et al. Quick Selection Guide to Chemical Protective Clothing. Sixth Edition. Hoboken, NJ. John Wiley & Sons, 2014.
Lide, D.R. CRC Handbook of Chemistry and Physics. 88th Edition. Boca Raton, FL. CRC Press, 2008.
UNECE. Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Third Revised Edition. New York and Geneva. United Nations, 2009.
US DOT; Pipeline and Hazardous Materials Safety Administration. 2008 Emergency Response Guidebook. Neenah, WI. J.J. Keller & Associates, Inc. 2008.
US EPA. Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. [Available] Online: <http://www.epa.gov/ceppo/pubs/title3.pdf>. Retrieved 02/02/2011.

ADDITIONAL SDS INFORMATION:

KEY / LEGEND

ACGIH - American Conference of Governmental Industrial Hygienists
ADR - Agreement on Dangerous Goods by Road
ASTM - American Society for Testing and Materials
CAA - Clean Air Act
CAS - Chemical Abstracts Service Registry Number
CDG - Carriage of Dangerous Goods By Road and Rail Manual
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CFR - Code of Federal Regulations
EINECS - European Inventory of Existing Chemical Substances Registry Number
NAERG - Emergency Response Guidebook
EPCRA - Emergency Planning and Community Right-to-Know Act
GHS - Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods Code
IMO - International Maritime Organization
MSDS - Material Safety Data Sheet
N/E - Not Established
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limit
PPE - Personal Protective Equipment
RCRA - Resource Conservation and Recovery Act
RID - Regulations Concerning the International Transport of Dangerous
RQ - Reportable Quantities
SARA - Superfund Amendments and Reauthorization Act of 1986
SDS - Safety Data Sheet
TCC - Tag Closed Cup
TDG - Transportation of Dangerous Goods

Date Revised: 5.14.2017



TLV - Threshold Limit Value

TSCA - Toxic Substance Control Act

UN/NA - United Nations / North American Number

UNECE - United Nations Economic Commission for Europe

US DOT - United States Department of Transportation

US EPA - United States Environmental Protection Agency

Vol. - Volume

WHMIS - Workplace Hazardous Materials Information System

GENERAL STATEMENTS: Other information not included anywhere else in this SDS is included in this section if, in fact, such data exists.

MANUFACTURER DISCLAIMER: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. **NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED.** It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

Boremaster is a registered trademark assigned to Setac Corporation