

## **Material Safety Data Sheet**

## **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: Buster

SYNONYMS: Hydrogen sulfate, Oil of Vitrol

PRODUCT CODES: 100916

MANUFACTURER: Theochem Laboratories Inc ADDRESS: 7373 Rowlett Park Drive Tampa, FL 33610-1141

EMERGENCY PHONE: ChemTel: North America: 1-800-255-3924

International +01-813-248-0585

CHEMICAL NAME: Sulfuric Acid

CHEMICAL FAMILY: Acid CHEMICAL FORMULA: H<sub>2</sub>SO<sub>4</sub>

PRODUCT USE: Drain Cleaner

PREPARED BY: TGD
REVISION NUMBER: 2.1
MSDS REVISION DATE: 01/19/10

## **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

The product may contain additional non-hazardous or trade-secret components.

#### **INGREDIENT:**

Sulfuric Acid	<u>CAS NO.</u> 7664-93-9	<u>% WT</u> 93 %	<u>% VOL</u> NA	<u>SARA 313 REPORTABLE</u> No
OSHA PEL-TWA: OSHA PEL STEL : OSHA PEL CEILING:	ppm NA NA NA	mg/m3 1 mg/m³ NA NA		
ACGIH TLV-TWA: ACGIH TLV STEL: ACGIH TLV CEILING:	NA NA NA	0.2 mg/m <sup>3</sup> NA NA		

## **SECTION 3: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:** 

ROUTE(S) OF ENTRY:

POTENTIAL HEALTH EFFECTS SHORT TERM/ACUTE EXPOSURE:

Eyes: Yes Inhalation: Yes Skin: Yes Ingestion: Yes

EYES: Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns. Can cause blindness.

**SKIN:** Corrosive. Symptoms of redness, pain, and severe burn can occur. Circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow skin contact or ingestion. Circulatory shock is often the immediate cause of death..

**INHALATION**: Inhalation produces damaging effects on the mucous membranes and upper respiratory tract. Symptoms may include irritation of the nose and throat, and labored breathing. May cause lung edema, a medical emergency

**INGESTION:** Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhea. Circulatory collapse with clammy skin, weak and rapid pulse, shallow

respirations, and scanty urine may follow ingestion or skin contact. Circulatory shock is often the immediate cause of death.

**CHRONIC HEALTH HAZARDS:** Long-term exposure to mist or vapors may cause damage to teeth. Chronic exposure to mists containing sulfuric acid is a cancer hazard.

CARCINOGENICITY: NTP: No ARC Monographs: Yes OSHA Regulated: No

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**: Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

#### **SECTION 4: FIRST AID MEASURES**

**EYES:** Flush with large amounts of running water for at least 15 minutes while holding upper and lower lids open. Seek Immediate medical attention.

**SKIN:** Immediately flush/wash with water for 15 minutes, while removing contaminated clothing and shoes. Seek inmediate medical attention.

INGESTION: DO NOT INDUCE VOMITING Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS**: Disorders of the organs (skins, lungs) may be aggravated by asthma like conditions.

## **SECTION 5: FIRE-FIGHTING MEASURES**

#### FIRE AND EXPLOSIVE PROPERTIES:

FLAMMABLE LIMITS IN AIR, UPPER: Not available (% BY VOLUME) LOWER: Not available

**FLASH POINT:** (Closed Cup): None **FLAMMABLE LIMITS**: None

**AUTOIGNITION TEMPERATURE:** None Known

NFPA HAZARD CLASSIFICATION

HEALTH: 4 FLAMMABILITY: 0 REACTIVITY: 2 OTHER: COR

HMIS HAZARD CLASSIFICATION

HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 2 PROTECTION: NA

**EXTINGUISHING MEDIA:** Dry chemical, foam or carbon dioxide. Do not use water on material. However, water spray may be used to keep fire exposed containers cool.

**SPECIAL FIRE FIGHTING PROCEDURES**: Wear self-contained-breathing-apparatus (SCBA) in positive pressure demand mode.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Water or foam will cause frothing which can cause violent reactions, endangering firefighters.

**HAZARDOUS DECOMPOSITION PRODUCTS: None** 

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**CLEAN-UP MEASURES**: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials,

such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities.

#### **SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Never add water to this product. If you want a diluted or weaker solution, put water in a separate container and slowly add this product. Keep container closed when not in use. Keep out of reach of children. As with any chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs. Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

**STORAGE**: Store in a cool, dry area away from combustibles and reactive chemicals. Do not store at temperatures above 120°F.

**OTHER PRECAUTIONS**: For Industrial & Institutional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**: It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should at a minimum, prevent airborne concentrations from exceeding any exposure limits listed in Section 2 of this MSDS.

The user may wish to refer to 29 CFR 1910.1000(d)(2) and the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indicies" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

**RESPIRATORY PROTECTION**: When using in a confined area, provide adequate ventilation or exhaust otherwise none needed.

**EYE PROTECTION**: Wear protective eyewear recommended by OSHA to prevent accidental exposure Wear eye protection appropriate to prevent eye exposure. Chemical goggles and full face shield is recommended.

SKIN PROTECTION: Wear polyvinyl chloride (PVC) or Butyl rubber gloves to prevent skin exposure.

**OTHER PERSONAL PROTECTIVE EQUIPMENT:** Impervious clothing and rubber boots. Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I

HYGIENIC PRACTICES: Wash hands after use. Keep containers closed when not in use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Red to Dark Brown Liquid

ODOR: Odorless

PHYSICAL STATE: Liquid

pH AS SUPPLIED: < 1

BOILING POINT: 580 °F

MELTING POINT: -31-52 °F

FREEZING POINT: NA

VAPOR PRESSURE (mmHg): < 0.3 mm Hg @25 °C

VAPOR DENSITY (AIR = 1): 3.4

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**SPECIFIC GRAVITY (H20 = 1):** 1.83

EVAPORATION RATE: < 1.0

**SOLUBILITY IN WATER:** Miscible with water, liberates much heat.

PERCENT SOLIDS BY WEIGHT: NA

PERCENT VOLATILE: NA

MOLECULAR WEIGHT: 98.08

VISCOSITY: NA

## **SECTION 10: STABILITY AND REACTIVITY**

**STABILITY**: Stable under ordinary conditions of use and storage. Concentrated solutions react violently with water, spattering and liberating heat.

**CONDITIONS TO AVOID (STABILITY):** Avoid contact with heat, moisture, combustible materials, powdered metals and alkalies.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Water, potassium chlorate, potassium perchlorate, potassium permanganate, sodium, lithium, bases, organic material, halogens, metal acetylides, oxides and hydrides, metals (yields hydrogen gas), strong oxidizing and reducing agents and many other reactive substances.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Toxic fumes of oxides of sulfur when heated to decomposition. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas, and with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively.

HAZARDOUS POLYMERIZATION: Will not occur

**CONDITIONS TO AVOID (POLYMERIZATION): Will not occur** 

## SECTION 11: TOXICOLOGICAL INFORMATION

EYE EFFECTS: standard Draize, eye rabbit, 250 ug (severe);

**SKIN EFFECTS**: No further toxicological data known.

oral effects: Oral rat LD50: 2140 mg/kg;

INHALATION EFFECTS: Inhalation rat LC50: 510 mg/m3/2H

**Carcinogenicity:** Cancer Status: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC category 1). This classification applies only to mists containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions.

**OTHER**: investigated as a tumorigen, mutagen, reproductive effector.

## SECTION 11: ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Fish: Bluegill/Sunfish: 49 mg/L; 48Hr; TLm (tap water @ 20C) Fish: Bluegill/Sunfish: 24.5 ppm; 48Hr; TLm (fresh water)

**ENVIRONMENTAL FATE:** When released into the soil, this material may leach into groundwater. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition...

Product Name: Buster

#### SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Ensure that collection, transport, treatment, and disposal of waste product, containers and rinsate complies with all applicable laws and regulations. Note that use, mixture, processing, or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal, whether the product is regulated as a hazardous waste. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA HAZARD CLASS: NA

#### **SECTION 14: TRANSPORT INFORMATION**

**U.S. DEPARTMENT OF TRANSPORTATION** 

PROPER SHIPPING NAME: Sulfuric Acid (more than 51 %)

HAZARD CLASS: Class 8
ID NUMBER: UN1830

PACKING GROUP:

**EXCEPTION:** 154 < 1 Liter **LABEL STATEMENT:** Poison

WATER TRANSPORTATION Stowage: C

AIR TRANSPORTATION Passenger: 1 Liter Cargo: 30 Liter

OTHER AGENCIES: Not Regulated

## **SECTION 15: REGULATORY INFORMATION**

#### **U.S. FEDERAL REGULATIONS**

SARA 313: This material contains Sulfuric acid (CAS# 7664-93-9, 90-98%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

CLEAN WATER ACT/OIL POLLUTION ACT: CAS# 7664-93-9 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**CERCLA REPORTABLE QUANTITY:** Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Release of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

COMPONENT: Sulfuriic Acid 1,000 lbs

**TOXIC SUBSTANCES CONTROL ACT:** The components of this product are listed on the TSCA Inventory.

**OZONE DEPLETING SUBSTANCES:** This product contains no ozone depleting substances as defined by the Clean Air Act.

**HAZARDOUS AIR POLLUTANTS**: Any components listed below are defined by the Federal EPA as hazardous air pollutants.

COMPONENT: None

STATE REGULATIONS: Check with the appropriate state agency to determine whether regulations exists.

INTERNATIONAL REGULATIONS:

# **European Labeling in Accordance with EC Directives Hazard Symbols:**

С

## **Risk Phrases:**

R 35 Causes severe burns.

## **Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 30 Never add water to this product.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## WGK (Water Danger/Protection)

CAS# 7664-93-9: 2

## Canada - DSL/NDSL

CAS# 7664-93-9 is listed on Canada's DSL List.

## Canada - WHMIS

This product has a WHMIS classification of D2A, D1A, E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

## **Canadian Ingredient Disclosure List**

CAS# 7664-93-9 is listed on the Canadian Ingredient Disclosure List.

## **SECTION 16: OTHER INFORMATION**

PREPARED BY: Department of Regulatory Compliance

**DATE OF ISSUE:** 3/29/06

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We believe the information given is accurate. It is offered in good faith, but without guarantee. Since conditions are beyond our control, user assumes all responsibility and risk.