



Powerhouse Drain Opener

Safety Data Sheet

Date of Issue: 02/10/2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Form: Clear colourless liquid
Product Name: Powerhouse Drain Opener
Product Code: STC0615

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the mixture: Drain opener

1.3 Details of the supplier of the safety data sheet

Sci-Tech Engineered Chemicals Inc.
9902 90th Avenue
Morinville AB, T8R 1K7
Ph: 780-960-1200 Fx: 780-960-1201
www.scitechinc.ca

Amre Supply Company Ltd.
#201, 1259 - 91 Street SW
Edmonton, AB T6X 1E9
Ph: 780-463-9977
www.amresupply.com

1.4 Emergency telephone number

CANUTEC (613) 996-6666

SECTION 2: Hazards identification

2.1 Classification of the substance of mixture

WHMIS 2015 - GHS Classification

Skin corrosion	1A
Serious eye damage/ Irritation	1
Corrosive to metals	1

2.2 Label elements



DANGER

Hazards:

H314	Causes severe skin burns and eye damage.
H302	Harmful if swallowed.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H290	May be corrosive to metals.

Precautions:	P102	Keep out of reach of children.
	P103	Read label before use.
	P232	Protect from moisture.
	P262	Do not get in eyes, on skin, or on clothing.
	P273	Avoid release to the environment.
	P280	Use personal protective equipment as required.

2.3 Other Hazards

SECTION 3: Composition/Information on ingredients

Component	CAS#	Concentration	LD ₅₀ (rat, oral)
Sulfuric acid	7664-93-9	100%	2140 mg/kg

SECTION 4: First-aid measures

Eye Contact:

Immediately rinse continuously with copious amounts of tepid water for a minimum of 20 minutes. Eyelids should be held apart and away from eyeball for thorough rinsing. Seek medical attention.

Skin Contact:

Immediately take off all contaminated clothing. Flush skin with copious amounts of tepid water for a minimum of 20 minutes. Do not rub or apply topical, occlusive compounds, such as ointments, certain creams, etc., on affected area. For severe exposure or if irritation persists, seek medical attention. Wash contaminated clothing before reuse.

Inhalation:

Immediately remove person to fresh air and keep comfortable for breathing. In case of severe exposure or if irritation persists, breathing difficulties or respiratory symptoms arise, seek medical attention. If not breathing, administer artificial respiration. If trained to do so, administer supplemental oxygen, if required. Respiratory injury may appear as a delayed phenomenon. Pulmonary edema may follow chemical bronchitis. Supportive treatment with necessary ventilation actions, including oxygen, may warrant consideration.

Ingestion:

Rinse mouth. Do not induce vomiting. If conscious, give large amounts of water to drink. If unconscious, do not give anything by mouth. Seek medical attention.

SECTION 5: Fire fighting measures

Extinguishing media:

Use extinguishing agents compatible with acid and appropriate for the burning material. Use water spray to keep fire-exposed containers cool.

Chemical hazards:

Releases sulphur oxides when heated.

Protective equipment for fire fighters:

Wear self-contained breathing apparatus and full protective clothing. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

Environmental Precautions:

Use closed systems when possible. Provide local exhaust ventilation where vapor or mist may be generated. Avoid discharge

into drains, water courses or onto the ground.

Containment and Cleaning:

Follow preplanned emergency procedures. Only properly equipped, trained, functional personnel should attempt to contain a leak. All other personnel should be evacuated from the danger area. Using full protective equipment, apply appropriate emergency device or other securement technology to stop the leak if possible.

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: neutralize the residue with a dilute solution of sodium carbonate.

Large Spill: Corrosive liquid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to knock down vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that vapor is not present at a concentration level above TLV.

SECTION 7: Handling and storage

Precautions for handling: Only trained persons should handle ammonium hydroxide.

Condition for safe storage: Store in cool, dry and well-ventilated areas, with containers tightly closed. Keep out of direct sunlight and away from heat sources. Do not use any non-ferrous metals such as copper, brass, bronze, aluminum, tin, zinc or galvanized metals. Protect containers from physical damage. Closed storage tanks should be provided with safety relief valves and vacuum breakers as necessary.

SECTION 8: Exposure controls/personal protection

Handling precautions: Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breathe mist or vapor. Observe good industrial hygiene practices. Do not empty into drains. Use caution when combining with water; DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes. Store in a well-ventilated place. Store away from incompatible materials. Store closed containers in a clean, cool, open or well ventilated area. Keep out of sun.

Appropriate engineering controls: Local exhaust should be sufficient to keep sulfuric acid vapor below applicable exposure standards.

Personal protective equipment: Eye Protection: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Other Protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Ventilation Recommended: Exhaust ventilation is required to meet PEL limits. Glove Type Recommended: Wear neoprene, nitrile, butyl rubber or PVC gloves to prevent exposure.

SECTION 9: Physical and chemical properties

Appearance:	Clear colourless liquid
Odour:	Mild sulfur
Odour threshold:	n.av
pH:	<1
Melting point:	n.av.
Initial boiling point and boiling range:	n.av.
Flash point	n.ap
Evaporation rate:	n.av.
Flammability:	Non-flammable
Upper/lower flammability limits:	n.av.
Vapour pressure:	1.33 hPa (1.00 mmHg) at 145.8 °C (294.4 °F)
Vapour density:	n.av
Relative density:	1.84 g/mL
Solubility:	Soluble in water
Partition coefficient: n-octanol/water:	n.av.
Auto-ignition temperature:	n.ap.
Decomposition temperature:	n.av.
Viscosity:	n.av

SECTION 10: Stability and reactivity

Chemical stability:	Sulfuric acid is stable under normal conditions and pressures.
Hazardous reactions:	Sulfuric acid will react exothermically with bases.
Conditions to avoid:	Incompatible materials, metals, excess heat, bases.
Incompatible materials:	Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals
Hazarous decomposition products:	Sulphur oxides

SECTION 11: Toxicological information

Routes of exposure:	Inhalation: Vapors and mist will irritate throat and respiratory system and cause coughing. Skin contact: Causes skin burns. Eye contact: Causes eye burns. Ingestion: Harmful if swallowed. Causes digestive tract burns. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.
Symptoms of exposure:	Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.
Delayed and immediate effects:	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, coughing, wheezing, laryngitis, shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed.
Acute toxicity estimate:	2140 mg/kg rat (oral)

SECTION 12: Ecological information

Ecotoxicity:	Toxicity to fish LC50 - <i>Gambusia affinis</i> (Mosquito fish) - 42 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - <i>Daphnia magna</i> (Water flea) - 29 mg/l - 24 h
Persistence and degradability:	Inorganic. Not applicable.
Bioaccumulative potential:	Data not available
Mobility in soil:	Data not available
Other adverse effects:	No other adverse environmental effects

SECTION 13: Disposal considerations

Product should be disposed of in accordance to provincial or state and local government requirements prior to disposal. If the product was supplied in a single use container, care should be taken to dispose of the container in a responsible manner in accordance to local regulations.

SECTION 14: Transport information

Canadian TDG: Sulphuric acid: Class 8, UN1830, PG II

SECTION 15: Regulatory information

DSL: All components are listed on the Canadian DSL

SECTION 16: Other information

Prepared by: Sci-Tech Engineered Chemicals Research and Development Department

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