

SAFETY DATA SHEET

SULFUROUS ACID SOLUTION

Section 1 - Chemical Product and Company Identification

SDS Name: Sulfurous Acid Solution
Catalog Numbers: G-461-3, SO-695
Company Identification: ROWLEY BIOCHEMICAL
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

HEALTH HAZARDS

H302-Acute Oral Toxicity: 4
H313-Acute Dermal Toxicity: 4
H333-Acute Inhalation Toxicity: 4
H316-Skin Corrosion/Irritation: 2
H320-Eye damage/Irritation: 2A
H334-Respiratory Sensitization: 1
H317-Skin Dermal Sensitization: 1A
H340-Germ Cell Mutagenicity: 2
H350-Carcinogenicity: 2
H361-Reproductive Toxicity: 2
H372-Specific Target Organ Toxicity: 2

PHYSICAL HAZARDS

H290-Corrosive to Metals: 1

ENVIRONMENTAL HAZARDS

Aquatic acute environmental Hazards: Not classified
Chronic environmental Hazards: Not classified

Pictograms or Hazard symbols and Hazard statement.



Warning: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.



Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Warning: Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs.



Warning: May be corrosive to metals.

Precautionary Statement

H290

P234 Keep only in original container.

P390 Absorb spillage to prevent material damage.

P406 Store in corrosive resistant container.

H302+H313+H333+H372

P264+P330-Wash thoroughly after handling. Rinse mouth.

P270-Do not eat, drink, or smoke when using this product.

P301+P312-IF SWALLOWED, INHALED, OR ON SKIN, call a POISON CENTER or physician if you feel unwell.

P260 Do not breathe fume/gas/mist/vapors.

H316

P332+P313-If skin irritation occurs: Get medical advice/attention.

H320

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313-If eye irritation persists: Get medical advice/attention.

H334

P261-Avoid breathing fumes/mist/vapors.

P285-In case of inadequate ventilation, wear respiratory protection.

P304+P341-IF INHALED, if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311-if experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

H317

P272-Contaminated work clothing should not be allowed out of the work place.

P280-Wear protective gloves, clothing, and eye and face protection.

P302+P352-If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

P363-Wash contaminated clothing before reuse.

H340+350+H361

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P308+P313-If exposed or concerned, get medical advice/attention.

P405-Store locked up.

DANGER! May cause allergy or asthma symptoms or breathing difficulties if inhaled. **Cancer suspect! Mutagenic Suspect!** WARNING! May be **corrosive** to metals. Causes serious eye **irritation**. Harmful in contact with skin. Suspected of damaging fertility or the unborn child.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7681-57-4	Sodium Metabisulfite	0.54 w/v
7647-01-0	Hydrochloric Acid	4.5 v/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Contact a physician if condition worsens.

Oral Exposure: If Swallowing seek immediate medical advice.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.

Extinguishing Media: Use water spray, dry chemical powder, or appropriate foam.

Flash Point: N/A

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear protective gear.

Methods for Cleaning up: Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped in a cool, well ventilated area. Keep away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Odor: Sulfurous. Irritating. (Strong.)

pH: 1.60-1.80

Water.

Vapor Pressure: 2.3 kPa @ 20deg. C

Vapor Density: 0.62 (Air=1)

Evaporation Rate: N/A

Viscosity: N/A

Boiling Point: 100 deg. C

Solubility: N/A

Section 10 - Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.

Conditions to Avoid: Heat, freezing.

Incompatibilities with Other Materials: Reactive with oxidizing agents, acids.

Hazardous Decomposition Products: Products of degradation are less toxic than the product itself.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: MW4025000, VZ2000000

LD50/LC50:

CAS# 7681-57-4

Acute oral toxicity (LD50): 1131 mg/kg [Rat].

Acute dermal toxicity (LD50): >1000 mg/kg [Guinea pig].

CAS# 7647-01-0

Acute oral toxicity (LD50): 900 mg/kg [Rabbit]

Acute toxicity of the vapor (LC50): 1108 ppm, 1 hours [Mouse]. 3124 ppm, 1 hours [Rat].

Carcinogenicity:

CAS# 7681-57-4: Not listed by ACGIH, NTP, or CA Prop 65.

Carcinogenic Effects: 3 (Not classifiable for human.) by IARC.

CAS# 7647-01-0: Not listed by ACGIH, NTP, or CA Prop 65.

Carcinogenic Effects: 3 (Not classifiable for human.) by IARC.

Mutagenicity: May affect genetic material based on animal test data.

Reproductive Effects: May cause adverse reproductive effects based on animal test data.

Section 12 - Ecological Information

CAS# 7681-57-4, 7647-01-0

Ecotoxicity: No information available.

Environmental: No information available.

Physical: No information available.

Other: No information available.

Section 13 - Disposal Considerations

Appropriate method of disposal of substance or preparation:

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

DOT

Non-Regulated

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

European/International Regulations

European Labeling in Accordance with EC Directives

Risk Phrases:

R48/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R36/37/38 Irritating to eyes, skin and respiratory tract.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitization by inhalation and skin contact.

R62/63/64 Possible risk of impaired fertility, harm to the unborn child and/or harm to breast-fed babies.

Safety Phrases:

S20/21 When using do not eat, drink or smoke.

S2 Keep out of the reach of children.

S3 Keep in a cool place.

S7 Keep container tightly closed.

S9 Keep container in a well-ventilated place.

S23 Do not breathe gas/fumes/vapour/spray.

S24 Avoid contact with skin.

S38 In case of insufficient ventilation wear suitable respiratory equipment.

S46 If swallowed, seek medical advice immediately and show this container or label.

Section 16 - Additional Information

MSDS Creation Date: 10/15/12

Revision #1. CF 9/10/13

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