

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: SCHIFF'S REAGENT
 CAS#: - Not available.
 C.I. No.: Not available.
 Synonym: Not available.
 Chemical Name:
 Not available.
 Chemical Formula: Not available.

Composition and Information on Ingredients

Name	S.K.U	% by Weight
SCHIFF'S REAGENT	GCS-1437	100
Sodium metabisulfite	7681-57-4	4
Hydrogen chloride	7647-01-0	0.37
Water	7732-18-5	94.6
Basic fuchsin	569-61-9	1

Hazards Identification

Potential Acute Health Effects:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant).

Potential Chronic Health Effects:

Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. Non-irritating to the eyes. Nonhazardous in case of ingestion. Non-hazardous in case of inhalation. CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA [Basic fuchsin]. Classified 2B (Possible for human.) by IARC [Basic fuchsin]. Classified 2 (Some evidence.) by NTP [Basic fuchsin]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures**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. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Handling and Storage**Precautions:**

Keep locked up.. Keep container dry. Do not ingest. Do not breathe gas/fumes/vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection:

Face shield. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Sodium metabisulfite TWA: 5 from ACGIH (TLV) [United States] [1995] Hydrogen chloride TWA: 5 CEIL: 5 from OSHA (PEL) [United States] TWA: 7.5 CEIL: 7 from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

Physical and Chemical Properties

Physical state and appearance

: **Liquid.**

Odor	: Not available.
Taste	: Not available.
Molecular Weight	: Not applicable.
Color	: Not available.
pH (1% soln/water)	: Acidic.
Boiling Point (212°F) (Water).	: The lowest known value is 100°C
Melting Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: Weighted average: 1.01 (Water = 1)
Vapor Pressure (@ 20°C) (Water).	: The highest known value is 2.3 kPa
Vapor Density = 1) (Water).	: The highest known value is 0.62 (Air
Volatility	: Not available.
Odor Threshold	: Not available.

Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: See solubility in water, methanol.

Solubility:

Easily soluble in cold water. Soluble in hot water, methanol.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of
Instability:

Not available.

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents, metals, alkalis.

Corrosivity:

Corrosive in presence of steel, of aluminum, of copper. Non-corrosive in presence of glass.

Special Remarks on Reactivity: Reacts violently with water especially when water is added to the product. (Hydrogen chloride)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 5000 mg/kg [Mouse]. (Basic fuchsin).

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA [Basic fuchsin].

Classified 2B (Possible for human.) by IARC [Basic fuchsin]. Classified 2 (Some evidence.) by NTP [Basic fuchsin].

Other Toxic Effects on Humans:

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. (Hydrogen chloride)

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
UN N°	: 3265
H.I. nr	80
ADR – Class	8
Labelling – Transport	: 8 : Corrosive substance.
ADR – Group	III

Sea transport (IMDG) [English only]

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
UN N°	: 3265
IMO-IMDG - Class or division	: 8 : Corrosive substance.
IMO-IMDG - Packing group	III

Air transport (ICAO-IATA) [English only]

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
UN N°	: 3265
IATA - Class or division	: 8 : Corrosive substance.-.
IATA - Packing group	III

Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Basic fuchsin
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Basic fuchsin
Pennsylvania RTK: Sodium metabisulfite; Hydrochloric acid
Florida: Basic fuchsin
Minnesota: Basic fuchsin
Massachusetts RTK: Sodium metabisulfite; Hydrochloric acid; Basic fuchsin

TSCA 8(b) inventory: Sodium metabisulfite; Hydrochloric acid; Water; Basic fuchsin
SARA 302/304/311/312 extremely hazardous substances: Hydrochloric acid SARA 313
toxic chemical notification and release reporting: Hydrochloric acid 1% CERCLA:
Hazardous substances.: Hydrochloric acid;
Other Regulations: Not available. or of its ingredients

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC): R45- May cause cancer.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 0

Personal Protection: g

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



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