Safety Data Sheet Turk's Crystal Violet Solution

Section 1 - Chemical Product and Company Identification

SDS Name: Turk's Crystal Violet Solution

Catalog Numbers: SO-755A

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.

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

H290-Corrosive to metals: 1 H314-Skin corrosion/irritation: 1A

H318-Serious eye damage/eye irritation: 1

H351-Carcinogenicity: 2

Pictograms or Hazard symbols and Hazard statement(s):





Signal Word: Danger

Hazard Statements:

H290-May be corrosive to metals H314-Causes severe skin burns and eye damage H318-Causes serious eye damage H351-Suspected of causing cancer

Precautionary Statements:

P201-Obtain special instructions before use.

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

P234-Keep only in original packaging.

P260-Do not breathe dusts or mists.

P264-Wash thoroughly after handling.

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

P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.

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

P308+P313-If exposed or concerned: Get medical advice/attention.

P310-Immediately call a Poison Center/doctor.

P363-Wash contaminated clothing before reuse.

P390-Absorb spillage to prevent material damage.

P405-Store locked up.

P406-Store in a corrosion resistant container with a resistant inner liner.

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

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
548-62-9	Crystal Violet	0.01 w/v
64-19-7	Glacial Acetic Acid	7.8 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. Seek immediate medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do NOT induce vomiting. Rinse mouth with water.

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

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion. **Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Flash Point: Not available

Autoignition Temperature: Not available **Explosion Limits, Lower:** Not available

Upper: Not available

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a cool, dry, and well-ventilated area. Light sensitive. 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.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Crystal Violet CAS#548-62-9	Not listed	Not listed	Not listed
Glacial Acetic Acid CAS#64-19-7	10 ppm TWA 15 ppm STEL	10 ppm TWA 25 mg/m3 TWA 15 ppm STEL 37 mg/m3 STEL 50 ppm IDLH	10 ppm TWA 25 mg/m3 TWA

OSHA Vacated PELs: Glacial Acetic Acid: 10 ppm TWA; 25 mg/m3 TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Dark blue-purple

Odor: Vinegar-like

Vapor Pressure: Not available Odor Threshold: Not available Vapor Density: Not available

pH: Approx. 2.2

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water **Boiling Point:** Not available **Flash Point:** Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not applicable

Partition coefficient: n-octanol/water: Not available

Autoignition Temperature: Not available **Decomposition Temperature:** Not available

Viscosity: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, and excess heat. Light

sensitive.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, strong reducing agents, acids, metals, chromic acid, ethylene glycol, perchloric acid, nitric acid, phosphorous trichloride, oxidizers, sodium peroxide, strong caustics, carbonates, hydroxides, oxides, and phosphates.

Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS#548-62-9 Crystal Violet: RTECS#: B09000000

LD50 Oral: 420 mg/kg (rat) LD50 Dermal: Not available LC50 Inhalation: Not available

Carcinogenicity: Crystal Violet CAS#548-62-9 is not listed by NTP, ACGIH, or OSHA. Crystal Violet is listed by IARC (Group 2B, Possibly Carcinogenic to Humans) and California Prop. 65 as a carcinogen.

CAS#64-19-7 Glacial Acetic Acid: RTECS#: AF1225000

LD50 Oral: 3310 mg/kg (rat)

LD50 Dermal: 1060 mg/kg (rabbit) LC50 Inhalation: 11.4 mg/L 4h (rat)

Investigated as a mutagen, reproductive effecter.

Skin corrosion/irritation: skin (rabbit), causes severe burns.

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes, causes serious eye

damage.

Carcinogenicity: Glacial Acetic Acid CAS#64-19-7 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available. **Teratogenicity:** Not available

Reproductive Effects: Not available.

Developmental Effects: Not available.

Neurotoxicity: Not available. **Mutagenicity:** Not available.

Specific Target Organ Toxicity, Single Exposure: Not available. **Specific Target Organ Toxicity, Repeated Exposure:** Not available.

Symptoms associated with exposure: Causes serious eye damage. Causes severe skin burns. Suspected of causing cancer. Exposure to eyes may cause pain, watering, redness, irritation, loss of sight. Overexposure by inhalation may cause respiratory tract irritation, coughing. Exposure to skin may cause pain, irritation, redness, burns, blistering. Ingestion may cause stomach pains and damage.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Toxic to aquatic life.

CAS#548-62-9 Crystal Violet:

ErC50, freshwater algae: >0.2 - <0.8 mg/L 72h static (pseudokirchneriella

subcapitata)(green algae)

EC50, water flea: >0.24 - <0.5 mg/L 48h static (daphnia magna)

CAS#64-19-7 Glacial Acetic Acid:

LC50, freshwater fish: 88 mg/L 96h (pimephales promelas)(fathead minnow)

LC50, freshwater fish: 75 mg/L 96h (lepomis macrochirus)(bluegill)

EC50, water flea: 95 mg/L 24h

EC50, microtox: 8.8 mg/L 5min (photobacterium phosphoreum)

Persistence and degradability: Not available. **Bio-accumulative potential:** Not available.

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

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 SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 5-31-23

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