



Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Product Identity:

CRYSTAL VIOLET 1%(w/v) SOLUTION in Glacial Acetic Acid

Supplier's Name:

S D FINE-CHEM LIMITED

Address: 315-317 T.V.IND. ESTATE, 248, WORLI ROAD,MUMBAI-400 030, INDIA

Emergency Contact:

phone: 91-22 2495 98 98 / 99FAX: 91-22 2493 7232Email: technical@sdfine.com

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Gentian (Crystal) Violet	548-62-9	0.1 - 1	Not Available	Not Available
			Not Available	Not Available
Acetic Acid	64-19-7	Balance	10 ppm	10 ppm
			25 mg/m3	25 mg/m3

Section 3: Hazard Identification

Emergency Overview: Danger! Corrosive liquid. May be fatal if swallowed. Causes severe burns to all areas of contact. Harmful if inhaled. Inhalation may cause lung and tooth damage. Immediately wash areas of contact with plenty of water for at least 15 minutes. If ingested, give large quantity of water. Do not induce vomiting. Crystal Violet contains a potential carcinogen.

Target Organs: eyes, skin, respiratory system, teeth.

Eye Contact: Eye contact may cause severe eye damage followed by loss of sight. Vapor exposure may cause watering and irritation to eyes.

Inhalation: Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat and lungs.

Skin Contact: May cause serious damage to the skin. Effects may include redness, pain, skin burns.

Ingestion: Swallowing can cause severe injury leading to death. Symptoms include sore throat, vomiting and diarrhea.

Chronic Effects/Carcinogenicity: Repeated exposures may cause erosion of exposed front teeth, darkening of skin and chronic inflammation of the nose, throat and bronchial tubes.

IARC - No.

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Gentian (Crystal) Violet. Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Acetic Acid. Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Acetic Acid.

Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Gentian (Crystal) Violet. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Acetic Acid. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Acetic Acid.

Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Skin Contact: Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Do not induce vomiting. Give large quantity of water. Call a physician immediately.

Section 5: Fire Fighting Measures

Flash Point: 39 C (Acetic Acid)

Method Used: CC

LFL: 4.0% (Acetic Acid)

UFL: 19.9% (ACETIC ACID)

Extinguishing Media: Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.

Fire & Explosion Hazards: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire. Vapors can flow along surfaces to distant ignition source and flash back. Reacts with most metals to produce hydrogen gas, which can form explosive mixture with air.

Fire Fighting Instructions: Use normal procedures/instructions.

Fire Fighting Equipment: Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Absorb with suitable material (paper towels, etc.) and dispose of in accordance with local regulations. Ventilate, if necessary, site of spillage well to evaporate remaining liquid and dispel vapor.

Section 7. Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Do not mix with bases. Store at 15oC (59oF) or above to prevent crystallization.

Safety Storage Code: Corrosive

Section 8: Exposure Control/Personal Protection

Engineering Controls: Work in fume hood.

Respiratory Protection: Work with adequate ventilation or wear respirator with acid gas /organic vapor cartridge.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Dark blue to violet/purple liquid

Odor: strong vinegar

Solubility in Water: Infinite

Specific Gravity: Approximately 1.05

pH: <1

Boiling Point(°C): Approximately 118

Melting Point(°C): Approximately 16.6

Vapor Pressure: 11 at 20oC

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage. Acetic acid contracts slightly upon freezing which may cause the container to burst.

Incompatibility: Strong bases, strong oxidizers, chromic acid, sodium peroxide, nitric acid, perchloric acid.

Hazardous Decomposition Products: When heated to decomposition it emits irritating fumes.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat (Acetic Acid): 3310 mg/kg, (Crystal Violet) 420 mg/kg; LD50, Dermal, Rabbit (Acetic Acid): 1.06 g/kg, details of toxic effects not reported other than lethal dose value; LC50, Inhalation, Mouse (Acetic Acid): 5620 ppm/1 hr., eye and blood effects noted. Crystal Violet is investigated as a tumorigen.

Section 12. Ecological Information

Ecotoxicological Information: Acetic Acid has high biochemical oxygen demand, and a potential to cause oxygen depletion in aqueous systems, low potential to affect aquatic organisms and a low potential to affect the growth of some plant seedlings.

Chemical Fate Information: Acetic Acid has low potential to bioconcentrate. If released to water or soil, acetic acid will biodegrade readily.

Section 13. Disposal Considerations

Neutralize with 5% Sodium Hydroxide or Sodium Carbonate solutions, and then pour into the drain while flushing with water, if allowed. If not allowed, save for recovery or recycling in an approved waste disposal facility.

Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: 2479-4, 2480-4, 2483-16, 2483-4, C-228 100ML, R2484000-500C, SC027500-100C

D.O.T. Shipping Name: Acetic Acid Solution

D.O.T. Hazard Class: 8 (3)

U.N. / N.A. Number: UN2789

Packing Group: II

D.O.T. Label: 8, 3



Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

Section 311/312 Hazardous Categories: Acute, Chronic, Fire, Reactivity: Yes Pressure: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Acetic Acid is listed as an Environmental Hazard on the state's Hazardous Substances List. Acetic Acid is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: D002, D002

CERCLA Reportable Quantity: Acetic Acid - 5,000 pounds. Acetic Acid - 5,000 pounds.

WHMIS: E: Corrosive Material. B-3: Flammable and Combustible Material. Combustible Liquid. D-2B: Poisonous and Infectious Material. Materials causing other toxic effects - Toxic Material.



Section 16. Other Information

NFPA Ratings:

Health: 3

Flammability: 2

Reactivity: 0

Special Notice Key:None

HMIS Ratings:

Health: 3*

Flammability: 2

Reactivity: 0

Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 12-14-99: (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300.

Rev 2, 6-27-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 7) added storage code; (Section 11) Added tumorigen reference; (Section 15) added Florida and Pennsylvania references.

Rev 3, 10-09-2001: Reformatted to electronic data format.

Rev 4, 12-01-2003: (Section 1) added Solutions Plus catalog number C027500; (Section 9) added violet to color appearance.

Rev 5, 08-26-2004: (Section 1) added catalog number R2484000; (Section 7) revised handling and storage information; (Section 9) added purple to appearance; (Section 15) added D2B to WHMIS information.

Rev 6, 12-05-2005: (Section 1) added Red Bird catalog number C-228.

Rev 7, 07-27-2007: (Section 6) revised information.

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.

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