



Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Product Identity:

DIPHENYLCARBAZONE - BROMOPHENOL BLUE SOLUTION

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

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
s-Diphenylcarbazone	538-62-5	< 1% (w/v)	Not Available	Not Available
			Not Available	Not Available
Bromophenol Blue, Sodium Salt	62625-28-9	< 0.1% (w/v)	Not Available	Not Available
			Not Available	Not Available
Ethyl Alcohol (Ethanol)	64-17-5	94 - 96% (v/v)	1000 ppm	1000 ppm
			1880 mg/m3	1900 mg/m3
Methanol (Methyl Alcohol)	67-56-1	4 - 6% (v/v)	200 ppm	200 ppm
			262 mg/m3	260 mg/m3

Section 3: Hazard Identification

Emergency Overview: Flammable liquid. Primarily toxic by ingestion. If ingested, give large quantity of water and induce vomiting. Call a physician. Contact may cause dryness and cracking of the skin. May cause irritation to the eyes. Wash areas of contact with plenty of water. May cause irritation of the respiratory system.

Target Organs: eyes, skin, respiratory system, central nervous system, liver, pancreas.

Eye Contact: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

Inhalation: May cause irritation of the eyes, nose and mucosa of the respiratory tract. Exposure to high concentrations can cause depression of the central nervous system with symptoms of sleepiness and lack of concentration.

Skin Contact: Results in drying and cracking which can lead to secondary infections and dermatitis.

Ingestion: Symptoms can include sleep disorders, hallucinations, distorted perceptions, ataxia, motor function changes, convulsions and tremors, coma, headaches, pulmonary changes, alteration of gastric secretions.

Chronic Effects/Carcinogenicity: None

IARC - No.

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Ethyl Alcohol (Ethanol). Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Methanol (Methyl Alcohol). Reproductive effects cited in 'Registry of Toxic Effects
Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Ethyl Alcohol (Ethanol). Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for s-Diphenylcarbazone. Mutation data cited in 'Registry of Toxic Effects of Chemical

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: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

Section 5: Fire Fighting Measures

Flash Point: approximately 15.5°C

Method Used: closed cup

LFL: 3.3%

UFL: 19%

Extinguishing Media: Use dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire. Use water as fog in flooding quantities. Water can be used to dilute spills to non-flammable mixtures.

Fire & Explosion Hazards: Vapors can flow along surfaces to distant ignition source and flashback. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire.

Fire Fighting Instructions: Poisonous gases are produced in fire. Continue to cool containers with water after fire is extinguished. For larger fires, use unmanned hose apparatus, if possible. Consider down wind conditions. Do not release runoff from fire-fighting measures to sewers or waterways.

Fire Fighting Equipment: Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

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. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

Safety Storage Code: Flammable

Section 8: Exposure Control/Personal Protection

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

Respiratory Protection: Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, deep red colored liquid

Odor: characteristic alcohol

Solubility in Water: Infinite

Specific Gravity: Approximately 0.8

pH: Not Available.

Boiling Point(°C): Approximately 77

Melting Point(°C): Approximately -110

Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatibility: Oxidizers, platinum, Sodium, Potassium Dioxide, Bromine Pentafluoride, Acetyl Bromide, Acetyl Chloride, heat, sparks, open flame.

Hazardous Decomposition Products: Acid and irritating fumes, including toxic oxides of carbon, when heated to decomposition.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat: (Methanol) 5628 mg/kg, (Diphenylcarbazone) >500 mg/kg, details of toxic effects not reported other than lethal dose value, (Ethanol) 7060 mg/kg, respiration changes noted.

Section 12. Ecological Information

Ecotoxicological Information: Ethanol has moderate chronic toxicity to aquatic life.

Chemical Fate Information: This material is not expected to significantly bioaccumulate. Ethanol is slightly persistent in water, with a half-life of between 2 to 20 days.

Section 13. Disposal Considerations

Absorb with suitable inert material (vermiculite, dry sand, earth) and place in a chemical waste container for proper disposal in an approved waste disposal facility for incineration in a chemical incinerator equipped with scrubber and afterburner. Ventilate area of spill. Have extinguishing agent available in case of fire. Eliminate all sources of ignition. Use non-sparking tools and equipment. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: 2610-16, 2610-32, 2610-4, D-138 100ML, D-138 500ML, D-138 LT

D.O.T. Shipping Name: Alcohols, n.o.s., (Ethanol and Methanol)

D.O.T. Hazard Class: 3

U.N. / N.A. Number: UN1987

Packing Group: II

D.O.T. Label: 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: Yes; Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Ethyl Alcohol (Ethanol) is listed as a Basic Hazard on the state's Hazardous Substances List. Methanol (Methyl Alcohol) is listed as an Environmental Hazard on the state's Hazardous Substances List. Methanol (Methyl Alcohol) is listed as an Environmental Hazard on the state's Hazardous Substances List. Ethyl Alcohol (Ethanol) is listed as a Basic Hazard on the state's Hazardous Substances List.

RCRA Status: U154, U154

CERCLA Reportable Quantity: Methanol (Methyl Alcohol) - 5,000 pounds. Methanol (Methyl Alcohol) - 5,000 pounds.

WHMIS: B-2: Flammable and Combustible Material. Flammable Liquid.



Section 16. Other Information

NFPA Ratings:

Health: 1	Flammability: 3	Reactivity: 0	Special Notice Key:None
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HMIS Ratings:

Health: 1	Flammability: 3	Reactivity: 0	Protective Equipment:B (Protective Eyewear, Gloves)
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The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

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