



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Dimidium Bromide - Sulphan Blue Mixed Solution R

Product Number R2572000

Other Identifying Product Numbers R2572000-120C, R2572000-500C

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company Ricca Chemical Company

Address 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Serious Eye Damage / Eye Irritation	Category 2	H319	P264,P280,P305+P351+P338, P337+P313

2.2. GHS Label Elements

Pictograms:



Signal Word: **Warning**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H319	Causes serious eye irritation

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

Prevention

Precautionary Number	Precautionary Statement
P264	Wash hands, arms, and face thoroughly after handling.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
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 or attention.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

1.3 percent of this mixture consists of ingredient(s) of unknown acute dermal toxicity.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
water	Water	7732-18-5	98.70
sulfuric acid	Sulfuric Acid	7664-93-9	0.97
ethanol	Ethyl Alcohol	64-17-5	0.29
propan-2-ol	Isopropyl Alcohol; 2-Propanol	67-63-0	< 0.1
methanol	Methyl Alcohol	67-56-1	< 0.1
5-methyl-6-phenylphenanthridin-5-ium-3,8-diamine bromide	Dimidium Bromide	518-67-2	< 0.1
sodium 4-[[4-(diethylamino)phenyl]-(4-diethylazaniumylidenecyclohexa-2,5-dien-1-ylidene)methyl]benzene-1,3-disulfonate	Sulfan Blue; Ethanaminium, N-[4-[[4-(diethylamino)phenyl]-(2,4-disulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, inner salt, sodium salt; Blue VRS; C.I. 42045; C.I. Acid Blue 1; 4,4'-Di(diethylamino)-4',6'-disulphotriphenyl methanol anhydride, sodium salt	129-17-9	< 0.1

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause slight irritation.

Ingestion: Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May cause slight irritation.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Causes serious eye irritation Does not present any significant health hazards. May cause irritation or discoloration to areas of contact. Wash areas of contact with water. EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation.

4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

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SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

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U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Ethyl Alcohol	64-17-5	1000 ppm TWA; 1900 mg/m3 TWA
Methyl Alcohol	67-56-1	200 ppm TWA; 260 mg/m3 TWA
Isopropyl Alcohol	67-63-0	400 ppm TWA; 980 mg/m3 TWA
Sulfuric Acid	7664-93-9	1 mg/m3 TWA

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

Chemical Name	CAS Number	Exposure Limit
Ethyl Alcohol	64-17-5	1000 ppm STEL
Methyl Alcohol	67-56-1	250 ppm STEL
Isopropyl Alcohol	67-63-0	400 ppm STEL

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Methyl Alcohol	67-56-1	200 ppm TWA
Isopropyl Alcohol	67-63-0	200 ppm TWA
Sulfuric Acid	7664-93-9	0.2 mg/m3 TWA (thoracic particulate matter)

8.2. Engineering Controls

No specific controls are needed. Normal room ventilation is adequate.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

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Eye Protection: Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	liquid
Color:	Yellow-Green
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	0.0°C
Boiling Point/Range:	100°C
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Not flammable
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	N/A
Kinematic Viscosity:	Data not available.
Solubility:	miscible
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	Data not available.
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, Acetic Acid, oxidizing agents, metals.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Ethyl Alcohol	64-17-5	Oral LD50 Rat 7060 mg/kg (Source: NLM_CIP)
Methyl Alcohol	67-56-1	Oral LD50 Acute Toxicity Estimate 100 mg/kg (Source: ECHA)
Isopropyl Alcohol	67-63-0	Oral LD50 Rat 4710 - 5840 mg/kg (Source: OECD_SIDS)
Sulfuric Acid	7664-93-9	Oral LD50 Rat 2140 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Dermal Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Methyl Alcohol	67-56-1	Dermal LD50 Acute Toxicity Estimate 300 mg/kg (Source: ECHA)
Isopropyl Alcohol	67-63-0	Dermal LD50 Rat 12800 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Inhalation Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Ethyl Alcohol	64-17-5	Inhalation LC50 Rat 116.9 mg/L 4 h (males, vapor, Source: ECHA_API); Inhalation LC50 Rat 133.8 mg/L 4 h (females, vapor, Source: ECHA_API)
Methyl Alcohol	67-56-1	Inhalation LC50 Acute Toxicity Estimate 3 mg/L 4 h (Source: ECHA)
Isopropyl Alcohol	67-63-0	Inhalation LC50 Rat >10000 ppm 6 h (no deaths occurred, vapor, Source: ECHA_API)
Sulfuric Acid	7664-93-9	Inhalation LC50 Rat 0.375 mg/L 4 h (aerosol, Source: OECD_SIDS)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Sulfan Blue	129-17-9	Group 3 (Not Classified) - Supplement 7 [1987]; Monograph 16 [1978]
Isopropyl Alcohol	67-63-0	Group 3 (Not Classified) - Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977]
Sulfuric Acid	7664-93-9	Group 1 (Carcinogenic to Humans) - Monograph 54 [1992] (occupational exposure to mists and vapours from sulfuric acid and other strong inorganic acids)



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National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Ethyl Alcohol	64-17-5	Male Rat - Not Tested; Female Rat - Not Tested; Male Mice - Inadequate Experiment; Female Mice - Inadequate Experiment (TR-510)
Sulfuric Acid	7664-93-9	Known Human Carcinogen (listed under Strong inorganic acid mists containing sulfuric acid)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
No data found.		

11.3 Additional Toxicology Information:

Causes serious eye irritation.

SECTION 12: Ecological Information

12.1. Ecotoxicity

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Chemical Name	CAS Number	Species	Exposure	Toxicity
Ethyl Alcohol	64-17-5	Earthworm	Acute	LC50 48 h Eisenia foetida 0.1 - 1 mg/cm2 [filter paper] (IUCLID)
Methyl Alcohol	67-56-1	Earthworm	Acute	LC50 48 h Eisenia foetida >1 mg/cm2 [filter paper] (IUCLID)
Isopropyl Alcohol	67-63-0	Freshwater Algae	Acute	EC50 96 h Desmodesmus subspicatus >1000 mg/L (IUCLID); EC50 72 h Desmodesmus subspicatus >1000 mg/L (IUCLID)
Ethyl Alcohol	64-17-5	Freshwater Fish	Acute	LC50 96 h Oncorhynchus mykiss 12.0 - 16.0 mL/L [static] (EPA); LC50 96 h Pimephales promelas >100 mg/L [static] (EPA); LC50 96 h Pimephales promelas 13400 - 15100 mg/L [flow-through] (EPA)
Methyl Alcohol	67-56-1	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 28200 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas >100 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static] (EPA); LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through] (EPA)
Isopropyl Alcohol	67-63-0	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 9640 mg/L [flow-through] (IUCLID); LC50 96 h Pimephales promelas 11130 mg/L [static] (IUCLID); LC50 96 h Lepomis macrochirus >1400000 µg/L (EPA)
Sulfuric Acid	7664-93-9	Freshwater Fish	Acute	LC50 96 h Brachydanio rerio >500 mg/L [static] (IUCLID)
Ethyl Alcohol	64-17-5	Water Flea	Acute	LC50 48 h Daphnia magna 9268 - 14221 mg/L (IUCLID); EC50 48 h Daphnia magna 2 mg/L [Static] (EPA)
Isopropyl Alcohol	67-63-0	Water Flea	Acute	EC50 48 h Daphnia magna 13299 mg/L (IUCLID)

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in soil

Data not available.

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12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT regulations.

14.2 Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.



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14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

SECTION 15: Regulatory Information

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15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
No data found.		

15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Chemical Name	CAS Number	RQ	TPQ
Sulfuric Acid	7664-93-9	1000 lb TPQ	1000 lb EPCRA RQ

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
Methyl Alcohol	67-56-1	5000 lb final RQ; 2270 kg final RQ
Sulfuric Acid	7664-93-9	1000 lb final RQ; 454 kg final RQ

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Methyl Alcohol	67-56-1	Emission Reporting	1.0 % de minimis concentration
Isopropyl Alcohol	67-63-0	Emission Reporting	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
Sulfuric Acid	7664-93-9	Emission Reporting	1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Ethyl Alcohol	64-17-5	Teratogen
Methyl Alcohol	67-56-1	Present
Isopropyl Alcohol	67-63-0	Present
Sulfuric Acid	7664-93-9	Extraordinarily hazardous

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15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Ethyl Alcohol	64-17-5	Present
Methyl Alcohol	67-56-1	Environmental hazard
Isopropyl Alcohol	67-63-0	Environmental hazard
Sulfuric Acid	7664-93-9	Environmental hazard

15.07. New Jersey Worker and Community Right-to-Know Components

Chemical Name	CAS Number	Regulatory Information
Sulfan Blue	129-17-9	sn 3517
Ethyl Alcohol	64-17-5	sn 0844
Methyl Alcohol	67-56-1	sn 1222
Isopropyl Alcohol	67-63-0	sn 1076
Sulfuric Acid	7664-93-9	sn 1761

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Ethyl Alcohol	64-17-5	"carcinogen, 7/1/1988 (when associated with alcohol abuse); carcinogen, 4/29/2011" As Alcoholic beverages [RR-01961-4]
Ethyl Alcohol	64-17-5	"developmental toxicity, 10/1/1987 (listed under Ethyl alcohol in alcoholic beverages)" As Alcoholic beverages [RR-01961-4]
Methyl Alcohol	67-56-1	developmental toxicity, 3/16/2012
Sulfuric Acid	7664-93-9	"carcinogen, 3/14/2003" As Strong inorganic acid mists containing sulfuric acid [RR-03978-1]

15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Chemical Name	CAS Number	List	Status
Sulfan Blue	129-17-9	DSL	Present
Ethyl Alcohol	64-17-5	DSL	Present
Ethyl Alcohol	64-17-5	NDSL	"Present" As Alcohols, C1-3 [68475-56-9]
Methyl Alcohol	67-56-1	DSL	Present
Methyl Alcohol	67-56-1	NDSL	"Present" As Alcohols, C1-3 [68475-56-9]
Isopropyl Alcohol	67-63-0	DSL	Present
Isopropyl Alcohol	67-63-0	NDSL	"Present" As Alcohols, C1-3 [68475-56-9]
Sulfuric Acid	7664-93-9	DSL	Present
Water	7732-18-5	DSL	Present

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15.10. United States of America Toxic Substances Control Act (TSCA) List

Chemical Name	CAS Number	Status
Sulfan Blue	129-17-9	Present (ACTIVE)
Ethyl Alcohol	64-17-5	Present (ACTIVE)
Methyl Alcohol	67-56-1	Present (ACTIVE)
Isopropyl Alcohol	67-63-0	Present (ACTIVE)
Sulfuric Acid	7664-93-9	Present (ACTIVE)
Water	7732-18-5	Present [XU] (ACTIVE)

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Chemical Name	CAS Number	List	Number
Sulfan Blue	129-17-9	EINECS	204-934-1
Dimidium Bromide	518-67-2	EINECS	208-256-7
Ethyl Alcohol	64-17-5	EINECS	200-578-6
Methyl Alcohol	67-56-1	EINECS	200-659-6
Isopropyl Alcohol	67-63-0	EINECS	200-661-7
Sulfuric Acid	7664-93-9	EINECS	231-639-5
Water	7732-18-5	EINECS	231-791-2

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Sulfan Blue	129-17-9	Present [33474]
Dimidium Bromide	518-67-2	Present [07085]
Ethyl Alcohol	64-17-5	Present [38125]
Methyl Alcohol	67-56-1	Present [16735]
Isopropyl Alcohol	67-63-0	Present [40403]
Sulfuric Acid	7664-93-9	Present [23017]
Water	7732-18-5	Present [32224]

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15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Sulfan Blue	129-17-9	Annex 1	Present [KE-20195]
Ethyl Alcohol	64-17-5	Annex 1	Present [KE-13217]
Methyl Alcohol	67-56-1	Annex 1	Present [KE-23193]
Isopropyl Alcohol	67-63-0	Annex 1	Present [KE-29363]
Sulfuric Acid	7664-93-9	Annex 1	Present [KE-32570]
Water	7732-18-5	Annex 1	Present [KE-35400]

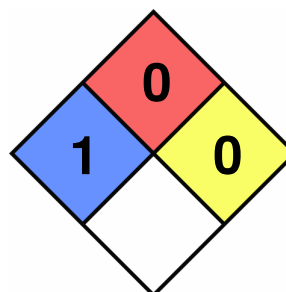
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Sulfan Blue	129-17-9	(5)-1630
Ethyl Alcohol	64-17-5	(2)-202
Methyl Alcohol	67-56-1	(2)-201
Isopropyl Alcohol	67-63-0	(2)-207
Sulfuric Acid	7664-93-9	(1)-430
Water	7732-18-5	- (listed on Japanese Pharmacopoeia 8th Edition)

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 1
Flammability: 0
Reactivity: 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
 2026-06-04

DISCLAIMER

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.