Safety Data Sheet RHODAMINE B

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SECTION 1: Identification

GHS Product identifier

Product name	RHODAMINE B

Other means of identification

Name	Product Code
RHODAMINE B LR Tetraethylrhodamine, C.I. 45170, C.I. Food red 15, 9- (2-Carboxyphenyl)-3,6-bis(diethylamino)x	RL004

Recommended use of the chemical and restrictions on use

Red dye for paper; also for wool and silk where brilliant fluorescent effects are desired and light-fastness is of secondary importance; analytical reagent for certain heavy metals, biological stain and laboratory reagent.

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com.au

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, oral, Cat. 4
- Serious eye damage/eye irritation, Cat. 1

GHS label elements, including precautionary statements

Pictograms

Signal word	**Danger**

Hazard statement(s)

H302	Harmful if swallowed
H318	Causes serious eye damage

Precautionary statement(s)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physcian if you feel unwell,
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physcian
P501	Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 479.03

Components

Component	CAS no.	Concentration
C.I. Food Red 15 (EC no.: 201-383-9)	**81-88-9**	**100 % (weight)**
CLASSIFICATIONS: Acute toxicity, oral, Cat. 4; Serious eye damage/eye irritation, Cat. 1. HAZARDS: H302 - Harmful if swallowed; H318 - Causes serious eye damage.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In case of skin contact	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. Give water to drink. DO NOT INDUCE VOMITING. Seek medical advice if symptoms persist.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Obtain medical attention immediately.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. Give water to drink. DO NOT INDUCE VOMITING. Seek medical advice if symptoms persist.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary
For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Small fire: Use dry chemical, CO2, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific hazards arising from the chemical
Hazards from Combustion Products: May librate toxic fumes in fire (oxides of nitrogen and hydrogen chloride).

May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire or heat may produce irritating, poisonous and/or corrosive gases.

Special protective actions for fire-fighters
Wear SCBA and structural firefighter's uniform.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Evacuate the area of all non-essential personnel. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
Wear protective clothing specified for normal operations (see Section 8)

Methods and materials for containment and cleaning up
Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for safe handling
Avoid generation or accumulation of dusts. Do not breathe dust. Do not get in eyes, on skin, on clothing.
Avoid prolonged or repeated exposure. Use in well ventilated areas away from all ignition sources.

Conditions for safe storage, including any incompatibilities
Store away from sources of heat or ignition. Store in well ventilated area. Store away from oxidizing agents. Store in a cool,dry place. Keep containers closed at all times.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls
In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection
Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection
Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection
Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Solid
Appearance	Green crystals or reddish-violet powder.
Color	No data available.
Odor	Almost odourless.
Odor threshold	No data available.
Melting point/freezing point	199-201 °C
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	pH 3-4 (10 g/l, H2O, 20 °C)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Slighty soluble (34 g/l @ 20 °C). Solubility in Organic Solvents: Very soluble in benzene, alcohol (forms bluish-red, fluorescent solution), slightly soluble in acids or alkalies.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 1.31
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)
Other Information: Weak cationic, fluorescent dye.

SECTION 10: Stability and reactivity

Reactivity
Stable under normal conditions of storage and handling.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Hazardous Polymerization: Will not occur.

Conditions to avoid
Incompatibles.

Incompatible materials
Strong oxidizing agents, reducing agents, nitrosing agents.

Hazardous decomposition products
Burning may produce ammonia, oxides of carbon, nitrogen oxides, hydrogen chloride gas.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Acute Toxicity - Oral: LD50 (mouse): 887 mg/kg
LDLO (rat): 500 mg/kg

Ingestion: Harmful by ingestion. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May be harmful by inhalation. May cause respiratory tract irritation. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

// ----- From the Suggestion report (18/07/2024, 10:04 AM) ----- //
The ATE (oral) of the mixture is: 500 mg/kg bw

Skin corrosion/irritation
May be harmful in contact with skin. May cause skin irritation. May be harmful if absorbed through the skin.

Serious eye damage/irritation
Causes severe irritation to the eyes. Risk of serious damage to eyes.

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available.

Carcinogenicity
Rhodamine B is evaluated in the IARC Monographs as Group 3: Unclassifiable as to carcinogenicity to humans.

Reproductive toxicity
No data available.

Summary of evaluation of the CMR properties
No data available.

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
No data available.

Aspiration hazard
No data available.

Additional information
Chronic Effects: Prolonged or repeated exposure may cause allergic reations in certain sensitive individuals (sensitization). Overexposure may cause liver and thyroid damage based on animal data.

SECTION 12: Ecological information

Toxicity
Known Harmful Effects on the Environment: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute Toxicity - Fish: LC50 (Cyprinodon variegatus - Sheepshead minnow): 83.9 mg/l/48 h.
LC50 (Lepomis macrochirus - Bluegill): 379 mg/l/96 h.
LC50 (Onchorhynchus mykiss - Rainbow trout): 217 mg/l/96 h.

Acute Toxicity - Daphnia: EC50 (Daphnia magna) 22.9 mg/l/48 h.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations
Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP
Poison Schedule: NS

SECTION 16: Other information

Further information/disclaimer
ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information
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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)