

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY NAME: Verdcol® Red 81 W

COMPANY DETAILS

EMERGENCY Use the following phone number:

International: +86 21 52835226 (Only available in working hour)

ADDRESS VERDCOL LTD.

No.10, Lane 112 Changshu Road, Jing'an District, Shanghai,

China

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2. HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

See Chapter 3

LABEL ELEMENTS





Risk phrases:

Risk of serious damage to eyes. (R41)

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (R50/53)

Safety phrases:

Avoid contact with skin and eyes. (S24/25)

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. (S26)

Wear suitable gloves and eye/face protection. (S37/39)

This material and its container must be disposed of as hazardous waste. (S60)

Avoid release to the environment. Refer to special instructions/safety data sheets. (S61)





Danger

Hazard statements:

Causes serious eye damage. (H318)

Very toxic to aquatic life with long lasting effects. (H410)

Very toxic to aquatic life (H400)

Precautionary statements:

Read label before use. (P103)

Avoid release to the environment. (P273)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)

Dispose of contents/container to (P501)



3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL

Generic Sample Names Pigment Red 81
Alternative Name/Intended Use C.I. No.: 45160:1
Chemical Type: Rhodamine
CAS Number(s) 12224-98-5
EU Number (s) 235-424-7

CLASSIFICATION OF THE SUBSTANCE

C; R41 N; R50/53

4. FIRST AID MEASURES

Inhalation Remove the affected person to fresh air, keep at rest in half

upright position and loosen clothing if necessary. If symptoms

persist, seek medical attention.

Ingestion Rinse mouth with plenty of water or milk to drink. If symptoms

persist, seek medical attention.

Eye Contact Irrigate with eye wash solution or clean water holding the eyelids

apart for at least 15 minutes. If symptoms persist, seek medical

attention.

Skin Contact Wash skin immediately with soap and water. If symptoms persist,

seek medical attention.

Further Medical Treatment Not Known

5. FIRE FIGHTING MEASURES

General If involved in a fire this material may emit irritating and toxic fumes

including oxides of nitrogen and carbon.

Do not allow run off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

Extinguishing Media Water fog, foam, carbon dioxide or dry chemical powder. Do not

use water jet.

Fire Fighting Protective Equipment Fire fighters should wear breathing apparatus for large fires.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure suitable personal protection during removal of spillages.

Environmental Precautions Do not allow to enter drains or water courses. In case of

contamination contact the Environmental Agency or appropriate

regulatory body immediately.

Methods of Cleaning Up Sweep up into suitable containers for disposal in accordance

with waste regulations (See section 13).

7. HANDLING AND STORAGE



Handling Use protective clothing as described in section 8. Avoid contact

with skin and eyes.

Reseal containers immediately after use. Provide adequate

ventilation.

Storage Store in a cool, dry place. Use sealed containers.

Specific Uses None. (See section 1).

Extra Information DANGER: Explosion risk if an air-dust mixture forms. Empty only

into earthed containers. Dust explosion class 1.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NOTE: All PPE should be changed / cleaned as necessary to avoid contamination / permeation.

EXPOSURE CONTROLS

Hand Protection PVC gloves for hygiene purposes.

Eye Protection Safety glasses or goggles.

Respiratory Protection Where necessary should conform to FFP2 (EN 149:2001) or

equivalent

Skin Protection Wear PVC apron. Avoid contact with the material.

Environmental Exposure Controls Any spillages should be thoroughly cleaned up. (See section 6).

OCCUPATIONAL EXPOSURE LIMITS (OEL)

Hazardous Ingredient(s) LTEL 8hrTWA STEL/TIME OSHA PEL ACGIH TLV

8hr TWA

Dust/Particles 10mg/m³ No data. Total dust: 15 Inhalable: 10

mg/m³ mg/m³ (Respirable: (Respirable: 5mg/m³) 3mg/m³)

9. PHYSICAL AND CHEMICAL PROPERTIES

NOTE: The data are provided for H&S purposes only - see section 16.

Description Red powder with no odour.

Density (g/cm 3) 1.8 ~ 1.9 Solubility (in water) Insoluble

No further information is available.

10. STABILITY AND REACTIVITY

Conditions to Avoid Stable under normal temperature conditions.

Materials to Avoid None known

Hazardous Decomposition Products Under fire conditions, this material may emit irritating and toxic

fumes including oxides of nitrogen and carbon.

Substance / Preparation Stabilized? No. This substance is stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Inhalation Not normally irritating.

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Ingestion Not normally irritating.

Eye Contact irritating.

Skin Contact Not normally irritating.

Long Term Exposure No mutagenic effects observed.

Toxicology

Toxicity End PointInhalationSkinIngestionEyeAcute Tox.No DataLD50>2000mg/kgLD50>5000mg/kgNo Data

(rat) (rat)

Irritation No Data Non-irritating (rabbit) No Data No Data

Sensitisation No Data Non-sensitising (guinea No Data No Data

pig, 84/449/EEC B.6)

There is no further toxicological data available for this product.

12. ECOLOGICAL INFORMATION

Persistence and Degradability Non-biodegradable over the 28-day test period (modified Sturm

test).

Ecotoxicity The product is insoluble in water. No adverse effects were

observed on daphnia magna or on algal growth and it is not

toxic to waste-water bacteria.

Bioaccumulative Potential Not known.

Mobility Not known.

Other Adverse Effects Not known.

13. DISPOSAL CONSIDERATIONS

Do not allow into drains, water courses or where ground/surface waters may be affected. Disposal should be in accordance with regulations under the Special Waste Regulations, the Landfill (England and Wales) Regulations 2001, the Environmental Protection Act 1990 and the Pollution Prevention and Control Act 1999 or appropriate local / national regulations.

Contaminated packaging should be treated as the substance preparation.

14. TRANSPORT INFORMATION

Land transport ADR / RID Hazard class: 9 Packing group: III ID number: UN 3077 Hazard label: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Rhodamine)

Sea transport IMDG

Hazard class: 9 Packing group: III



ID number: UN 3077 Hazard label: 9 Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Rhodamine)

Air transport IATA/ICAO Hazard class: 9 Packing group: III ID number: UN 3077 Hazard label: 9

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(Rhodamine)

15. REGULATORY INFORMATION

LABELLING

See Chapter 2

EUROPEAN REGULATIONS

EINECS Status EINECS listed

US REGULATIONS

CERCLA Sections 102a/103 Hazardous Substances (40 CFR 302.4): Not Regulated.

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355.30): Not Regulated.

SARA Title III Section 304 Extremely Hazardous Substances (40 CFR 355.40): Not Regulated.

SARA Title III Section 311/312 Hazardous Categories (40 CFR 370.21): Acute-No, Chronic-No, Fire-Yes,

Reactive-No Sudden Release-No

SARA Title III Section 313(40 CFR 372.65): Not Regulated. OSHA Process Safety (29CFR1910.119): Not Regulated. California Proposition 65: Not Regulated.

OTHER REGULATIONS

Germany: WGK class 3 (extremely hazardous to water).

Canada DSL: Listed

This MSDS has been prepared in accordance with the requirements of:

Regulation(EC) No 1272/2008 of the European Parliament and of the council of 16 December 2008 on

classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC. and amending Regulation(EC) No 1907/2006

The Dangerous Substances Directive (67/548/EEC) as amended by the 7th Amendment (92/32/EEC) and Directive 2001/59/EC)...

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. (UK)

OSHA Hazard Communication Standard. (US)

This MSDS is intended to assist in compliance with the following legislation/guidance:

Health and Safety at Work Act 1974. (UK)

Control of Substances Hazardous to Health Regulations 2002. (UK)

COSHH Essentials. (UK)

Dangerous Substances and Explosive Atmospheres Regulations 2002. (UK) Pollution Prevention and Control (England and Wales) Regulations 2000. (UK)

Toxic Substances Control Act. (US)

Superfund Amendment and Reauthorization Act (SARA). (US)

Federal Food, Drug and Cosmetic Act. (US)

Federal Insecticide, Fungicide and Rodenticide Act. (US)



Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). (US) California Proposition 65. (US) OSHA Process Safety. (US)

16. OTHER INFORMATION

The material supplied is intended only for industrial or laboratory use.

This document contains important information to ensure the safe handling and use of the material. The information in this document should be brought to the attention of the person in your organization responsible for advising on safety matters.

The technical information provided in this MSDS should only be used for the purpose of assessing hazards with respect to safety or the environment. It should not be used as a technical specification or engineering calculations. For details regarding specification or other product / technical data, contact VERDCOL LTD. using the address on the first page.

The information contained herein is accurate to the best knowledge and belief of VERDCOL LTD. and intended to describe the product for the purposes of health, safety and environmental requirements only. It is given in good faith, but is not intended, and should not be construed, as a warranty. It remains the user's own responsibility to ensure that the information is appropriate and complete for their use of this product and that all necessary steps are taken to meet the requirements of applicable legislation.

This MSDS was last revised in April 2013 - New MSDS

Abbreviations:

LTEL	Long Term Exposure Limit	OSHA	Occupational Safety and Health Administration
STEL	Short Term Exposure Limit	ACGIH	American Conference of Governmental Industrial Hygienists
TWA	Time Weighted Average	SK	Can be absorbed through the skin
PEL	PermissiblePermissible Exposure Limit	Sen	Capable of causing respiratory sensitization
TLV	Threshold Limit Values	IMDG	International Maritime Dangerous Goods
ICAO	International Civil Aviation Organisation	IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation	IATA	International Air Transport Association
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail		