

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

NAME: TEST SAMPLE: VERDCOL Red 81 S

COMPANY DETAILS

EMERGENCY

Use the following phone number:
International: +86 21 32517060
(Only available in working hour)

ADDRESS

VERDEX XINLI CO, LTD.
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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

2. COMPOSITION/INFORMATION ON INGREDIENTS

This material is a coloring agent used in the preparation of ink.

HEALTH HAZARDS

This material contains no ingredients/impurities classified as hazardous to health according to EU and UK chemicals legislation.

Refer to Section 15 for full text of risk phrases

3. HAZARD IDENTIFICATION

Not classified as hazardous according to rules and criteria in European Community Directives

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	None 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)

<u>Hazardous Ingredient(s)</u>	<u>LTEL 8hrTWA</u>	<u>STEL/TIME</u>	<u>OSHA PEL 8hr TWA</u>	<u>ACGIH TLV</u>
Dust/Particles	10mg/m ³	No data.	Total dust: 15 mg/m ³ (Respirable: 5mg/m ³)	Inhalable: 10 mg/m ³ (Respirable: 3mg/m ³)

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.
 Ingestion Not normally irritating.
 Eye Contact Not normally irritating.
 Skin Contact Not normally irritating.
 Long Term Exposure No mutagenic effects observed.

Toxicology

<u>Toxicity End Point</u>	<u>Inhalation</u>	<u>Skin</u>	<u>Ingestion</u>	<u>Eye</u>
Acute Tox.	No Data	LD50>2000mg/kg (rat)	LD50>5000mg/kg (rat)	No Data
Irritation	No Data	Non-irritating (rabbit)	No Data	Non-irritating (rabbit, 84/449/E) EC B.5.
Sensitisation	No Data	Non-sensitising (guinea pig, 84/449/EEC B.6)	No Data	No Data

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

This material is not dangerous for transportation.

15. REGULATORY INFORMATION

LABELLING

Verdcol Red 81 S
EU No 235-424-7
S22: Do not breathe dust.

EUROPEAN REGULATIONS

Classification	Not applicable
EINECS Status	ELINCS listed

TEXT OF RISK PHRASES MENTIONED ELSEWHERE IN MSDS

None

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 1 (low hazard to waters).
Canada DSL: Listed
This MSDS has been prepared in accordance with the requirements of:
The Dangerous Substances Directive (67/548/EEC) as amended by the 7th Amendment (92/32/EEC) and Directive 2001/59/EC).
The Dangerous Preparations Directive (1999/45/EC).
The Safety Data Sheets Directive (91/155/EEC) as amended by Directives 93/112/EC and 2001/58/EC.
The Marketing and Use Directive (76/769/EEC).
Classification (Hazards, Information and Packaging) 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 VERDEX XINLI CO, LTD., using the address on the first page.

The information contained herein is accurate to the best knowledge and belief of VERDEX XINLI CO, 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 1 April 2010 – 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	Permissible Permissible Exposure Limit	Sen	Capable of causing respiratory sensitization
TLV	Threshold Limit Values		