SAFETY DATA SHEET

according to Commission Directive 2001/58/EC

Print date: 01/11/2006 **Version:** 2 **Revision date:** 01/11/2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

Product trade name: **REMBRANDT RED OXIDE**

Internal code: 45RO

Use of the substance/preparation

Application: Dye

Company/undertaking identification

Supplier:

Epmar Corporation
13210 E. Barton Circle
Santa Fe Springs, CA 90605-3254
Phone: 562-946-8781
FAX: 562-944-9958
E-MAIL: info@epmarcorp.com
E-MAIL:she@quakerchem.com
(For Health and Safety Questions)

Emergency telephone number:

* 24 HOUR TRANSPORTATION:
**CHEMTREC: 1-800-424-9300
703-527-3887 (Call collect outside of US)
* 24 HOUR EMERGENCY HEALTH & SAFETY:
**QUAKER CHEMICAL CORPORATION: (800) 523-7010(Within US only)
Outside of US call (703) 527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature of the substance or preparation:
Product is a mixture of:

HAZARDOUS COMPONENTS

Components	CAS No.	EC No.	Weight %	Classification
Ethylene glycol monobutyl ether	111-76-2	203-905-0	1 - 5%	Xi;R36/38 Xn;R20/21/22
Proprietary pigment component	Proprietary	Not Listed	1 - 5%	Xi;R36/37
Diethylene glycol monomethyl ether	111-77-3	203-906-6	1 - 5%	Repr. Cat.3;R63
Proprietary surfactant	Proprietary	Not Listed	1 - 5%	Xi;R36/37/38
Proprietary pigment component	Proprietary	Not Listed	1 - 5%	Xn;R20/21/22

3. HAZARDS IDENTIFICATION

Indication of danger:
Not dangerous goods

Most important hazards:

4. FIRST AID MEASURES

General advice: If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

Notes to physician: Treat symptomatically.

Medical condition aggravated by exposure: Dermatitis.

5. FIRE-FIGHTING MEASURES

Flash point (°C): NA

Flash point method: -

Explosion limits:
- lower: Not applicable

- upper:	Not applicable
Suitable extinguishing media:	Use dry chemical, CO2, water spray or "alcohol" foam
Extinguishing media which must not be used for safety reasons:	High volume water jet
Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:	Carbon monoxide (CO)
Specific hazards:	No information available
Unusual hazards:	None known
Special protective equipment for fire-fighters:	Standard procedure for chemical fires.
Specific methods:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Use personal protective equipment.
Environmental precautions:	Do not flush into surface water or sanitary sewer system.
Methods for cleaning up:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical measures/precautions:	Provide sufficient air exchange and/or exhaust in work rooms.
Safe handling advice:	In case of insufficient ventilation, wear suitable respiratory equipment.

Storage

Technical measures/storage conditions:	Store at room temperature in the original container
Incompatible products:	strong oxidizing agents
Safe storage temperature:	4 - 40 °C
Shelf life:	12 months

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

Ethylene glycol monobutyl ether

EU - Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV) - Skin Absorbers	possibility of significant uptake through the skin
EU - Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV) - TWAs	= 246 mg/m³ STEL = 50 ppm STEL
EU - Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV) - TWAs	= 20 ppm TWA = 98 mg/m³ TWA
Austria - OEL - Skin Absorbers	Skin absorber
Austria - OEL - STEL	= 200 mg/m³ STEL 30 min = 40 ppm STEL 30 min
Austria - OEL - TWA (MAK)	= 20 ppm MAK = 98 mg/m³ MAK
Belgium - OEL -Skin Designation	Skin
Belgium - OEL - STEL	= 246 mg/m³ VLE = 50 ppm VLE
Belgium - OEL - TWA (MAK)	= 123 mg/m³ VLE = 25 ppm VLE
Czeck Republic - OEL - TWA	= 100 mg/m³ TWA
Denmark - OEL - Skin Absorbers	Potential for cutaneous absorption
Denmark - OEL - TWA	= 20 ppm TWA = 98 mg/m³ TWA
Estonia - OEL - STEL	= 246 mg/m³ STEL = 50 ppm STEL
Estonia - OEL - TWA	= 20 ppm TWA = 98 mg/m³ TWA
Finland - OEL - Skin Absorbers	Potential for cutaneous absorption
Finland - OEL - STEL	= 250 mg/m³ STEL = 50 ppm STEL
Finland - OEL - TWA	= 20 ppm TWA = 98 mg/m³ TWA
France - OEL - Observations	Risk of cutaneous absorption
France - OEL - STEL	= 147.6 mg/m³ VLE = 30 ppm VLE
France - OEL - TWA	= 2 ppm VME = 9.8 mg/m³ VME
Germany OEL - TRGS 900	= 20 ppm TWA = 98 mg/m³ TWA
Greece - OEL - TWA	= 120 mg/m³ TWA = 25 ppm TWA

Hungary - OEL - Skin Absorbers	potential for cutaneous absorption
Hungary - OEL - STEL	= 246 mg/m³ STEL
Hungary - OEL - TWA	= 98 mg/m³ TWA
Iceland - OEL - STEL	= 246 mg/m³ STEL = 50 ppm STEL
Iceland - OEL - TWA	= 100 mg/m³ TWA = 20 ppm TWA
Ireland - OEL - STEL	= 246 mg/m³ STEL = 50 ppm STEL
Ireland - OEL - TWA	= 20 ppm TWA = 98 mg/m³ TWA
Italy - OEL - TWA	= 20 ppm TWA = 98 mg/m³ TWA
Italy - OEL - STEL	= 246 mg/m³ STEL = 50 ppm STEL
Italy - OEL - Skin Absorbers	skin - potential for cutaneous absorption
Israel - OEL - TWA	= 20 ppm TWA
Netherlands - OEL - STEL	= 246 mg/m³ STEL = 50 ppm STEL
Netherlands - OEL - TWA	= 100 mg/m³ MAC = 20 ppm MAC
Norway - OEL- TWA	= 10 ppm OEL = 50 mg/m³ OEL
Poland - OEL- STEL	= 200 mg/m³ NDSCh
Portugal - OEL - TWA	= 20 ppm TWA
Spain - OEL - Skin Absorbers	skin - potential for cutaneous exposure
Spain - OEL - STEL (VLA-EC)	= 245 mg/m³ VLA-EC = 50 ppm VLA-EC
Spain - OEL - TWA (VLA-ED)	= 20 ppm VLA-ED = 98 mg/m³ VLA-ED
Spain - OEL - STEL (VLA-EC)	= 245 mg/m³ VLA-EC = 50 ppm VLA-EC
Sweden - OEL - Skin Absorbers	Present
Sweden - OEL - STEL (STV)	= 100 mg/m³ STV = 20 ppm STV
Sweden - OEL - TLV (LLV)	= 10 ppm LLV = 50 mg/m³ LLV
Switzerland - OEL - STEL	= 400 mg/m³ STEL = 80 ppm STEL
Switzerland - OEL- TWA	= 100 mg/m³ MAK = 20 ppm MAK
ACGIH Exposure Limits:	20 ppm

Diethylene glycol monomethyl ether

Finland - OEL - Skin Absorbers	Potential for cutaneous absorption
Finland - OEL - TWA	= 10 ppm TWA = 50 mg/m³ TWA
Netherlands - OEL - TWA	= 45 mg/m³ MAC = 9 ppm MAC

Further information: None

Exposure controls

Occupational exposure controls

Engineering measures: Ensure adequate ventilation.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection: Neoprene gloves - 0.75 mm - 30 min.

Eye protection: Safety glasses

Skin and body protection: Long sleeved clothing

Environmental exposure controls

Recommendations: none

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Physical state: Liquid
Color: Red
Odour: Slight

Important health, safety and environmental information

Property	Result	Method
pH:	Not determined	ASTM D 1293-84
at	-	-
Boiling point/boiling range (°C):	100	ASTM D 1120-94
Flash point (°C):	NA	-
Flammability (solid, gas):	No data available	-
Explosive properties:		
- upper limit:	No data available	-
- lower limit:	No data available	-
Oxidising properties:	No data available	-
Vapour pressure:	No data available	-
Relative density:	1.197 (g/cm3)	ASTM D 1298-88
at	15.5 (°C)	
Solubility:		
- water solubility:	Dispersible	-
- fat solubility:	Not determined	-
Partition coefficient (n-octanol/water, log Pow):	Not determined	-
Viscosity:	Not determined	ASTM D 445-88
at	40 (°C)	-
Vapour density:	No data available	-
Evaporation rate:	No data available	-

Other information

Property	Result	Method
Miscibility:	Not determined	-
Conductivity:	Not determined	-
Melting point/melting range (°C):	Not determined	-
Gas group:	Not determined	-
Auto-ignition temperature:	Not determined	-
Molecular weight:	Not determined	-
Decomposition temperature:	Not determined	-

10. STABILITY AND REACTIVITY

Stability:

Stable under recommended storage conditions.

Conditions to avoid:

None known

Materials to avoid:

Strong acids and oxidising agents

Hazardous decomposition products:

None under normal use

Polymerization:

Not applicable

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 (oral/rat): No data - mg/kg

Long-term effects

Other long-term effects: No data available

Local effects

Oral: No data available

Skin irritation: No skin irritation

Eye irritation: Contact with eyes may cause irritation

Sensitization: May cause sensitization of susceptible persons

Additional toxicological information: None

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ethylene glycol monobutyl ether

Ecotoxicity - Fish Species Data = 1490 mg/L LC50 bluegill 96 h static
= 1650 mg/L LC50 goldfish 24 h

Diethylene glycol monomethyl ether

Ecotoxicity - Fish Species Data = 1000 mg/L LC50 rainbow trout 96 h
= 7500 mg/L LC50 bluegill 96 h static

Inhibitory effects: None known

Behaviour in sewage treatment plants: None known

Mobility

Distribution to environmental compartments: No data available

Surface tension: No data available

Persistence and degradability

BOD Not determined

Potential degradation: Not determined

Degradation half life: Not determined

Degradation in sewage treatment plants: Not determined

Bioaccumulative potential

Bioaccumulation: Not applicable

Other adverse effects

Ozone depletion potential (R-11 = 1): Not determined

Photochemical ozone creation potential: Not determined

Global warming potential: Not determined

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products: Dispose of in accordance with local regulations

Contaminated packaging: Dispose of as unused product.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly.

EWC waste disposal No.: Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

14. TRANSPORT INFORMATION

ADR

Class: Not classified

RID

Class: Not classified

IMO/IMDG

Class: Not classified

ICAO

Class: Not classified

IATA

Hazard Class: Not classified

15. REGULATORY INFORMATION

EC classification and labelling (67/548/EEC - 1999/45/EC)

Indication of danger: Not dangerous goods

R phrases:
None

S phrases:
None

National regulations

Water endangering class WGK (D): No information available

Maladies Professionnelles (F): Not Listed

EC EINECS/ELINCS/NLP list: This product complies with EINECS.

16. OTHER INFORMATION

List of relevant R phrases

Further information:

Recommended restrictions on use: No information available

Training advice: See our technical data sheet.

Further information: Contact manufacturer

Prepared by: Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

Reason for revision: This data sheet contains changes from the previous version in section(s) 1,9

Disclaimer

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End of Safety Data Sheet