Infosafe No™	1CH3E	Issue Date :January 2016	RE-ISSUED by CHEMSUPP

Product Name : **FERRIC OXIDE Red**

Not classified as hazardous

1. Identification

GHS Product Identifier	FERRIC OXIDE Red
Company Name	CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)
Address	38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number	Tel: (08) 8440-2000 Fax: (08) 8440-2001
Recommended use of the chemical and restrictions on use	Metallurgy, gas purification, paint and rubber pigment, electronic pigments for TV, component of thermite, polishing compounds, mordant, laboratory reagent, memory cores for computers, semi-conductors, permanent magnets, magnetic tapes and feed additive. Used medicinally in the treatment of arsenic poisoning in oral doses of up to 1 gram.

Other Names

Name	Product Code
IRON(III) OXIDE Red LR	FL012
Iron (III) oxide	
Jewellers' rouge	
Iron oxide pigment	
Iron sesquioxide	
C.I. 77491	

Other Information

EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply 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 Chem-Supply 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 Chem-Supply 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.

2. Hazard Identification

GHS classification of the substance/mixture	Not classified as hazardous according to the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004] 3rd Edition, Safe Work Australia. Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

3. Composition/information on ingredients

Chemical Characterization Solid

Ingredients

Name	CAS	Proportion	Hazard Symbol	Risk Phrase
Ferric oxide	1309-37-1	94-100 %		

4. First-aid measures

Inhalation	Remove victim to fresh air. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical advice if effects persist.
Ingestion	Rinse mouth thoroughly with water immediately. Give plenty of water to drink. If rapid recovery does not occur, obtain medical attention
Skin	Remove contaminated clothing and wash affected skin with soap and water. Contaminated clothing must be laundered before re-use Seek medical advice if effects persist.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. If persistent irritation occurs, obtain medical attention.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of the patient.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Specific Methods	Use extinguishing media most appropriate for the surrounding fire. No limitations to the type of extinguishing media. Material does not burn. Small fire: Use dry chemical, CO2, water spray or foam. Large fire: Use water spray, fog or foam.
Precautions in connection with Fire	Wear SCBA and structural firefighter's uniform.

6. Accidental release measures

Personal Precautions	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)
Clean-up Methods - Small Spillages	Sweep up (avoid generating dust) and using clean non-sparking tools transfer to a clean, suitable, clearly labelled container for disposal in accordance with local regulations.

7. Handling and storage

Precautions for Safe Handling	Avoid substance contact and generation and inhalation of dust. Wash hands and face thoroughly after working with material.
Conditions for safe storage, including any incompatabilities	Keep container tightly closed and dry, away from direct sunlight. Store at room temperature (15 - 25 °C).
Unsuitable Materials	Aluminium.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Ferric oxide			5		Iron oxide fume (Fe2O3) (as Fe)

Other Exposure Information	A time weighted average (TWA) has been established for Iron oxide fume (Fe2O3) (as Fe) (Safe Work Australia) of 5 mg/m³. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. Listed in the Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)], in Exposure Standards for Atmospheric Contaminants in the Occupational Environment: Guidance Note and National Exposure Standards, AusInfo, Canberra, 1995. Health Hazard. CAS 1309-37-1 was listed by NOHSC due to its Fume Exposure Standard but is not classified as a Hazardous Substance as this only applies to when a fume is formed, not to the supplied powder.
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.
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.
Eye 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.
Hand Protection	Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.
Personal Protective Equipment	Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
Footwear	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

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. When handling large quantities, disposable one-piece coated overall with integral hood.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Solid
Appearance	Reddish-brown powder or lumps.
Odour	Odourless.
Melting Point	1565 °C
Solubility in Water	Insoluble.
Specific Gravity	4.5 - 5.0 (tamped down apparent density 0.9 - 1.3)
pH	5 - 8 (of a 5% powder in water slurry)
Volatile Component	<0.5%
Flammability	Non combustible material.
Molecular Weight	159.70
Other Information	Soluble in acids.

10. Stability and reactivity

Chemical Stability	Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid	Incompatible materials, dust generation, excess heat.
Incompatible Materials	Aluminium (risk of explosion!), bromine pentafluoride, calcium hypochlorite, carbon dioxide, cesium carbide, ethylene oxide, hydrazine, performic acid.
Hazardous Decomposition Products	Irritating and toxic fumes and gases.
Possibility of hazardous reactions	Reacts violently with aluminium, calcium hypochlorite, cesium carbide, hydrazine and ethylene oxide.
Hazardous Polymerization	Has not been reported.

11. Toxicological Information

Toxicology Information	No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. If mishandled or overexposed to this product the following symptonm or effects may occur.
Ingestion	Harmful if swallowed. May cause gastrointestinal discomfort, diarrhoea, constipation, severe pain, nausea, vomiting and shock. May cause severe and permanent damage to the digestive tract. May cause liver damage. Symptoms of the ingestion of large amounts may be delayed for several hours and can include epigastric pain, haematemesis, CNS disorders and possible circulatory failure. Hours or days after apparent recovery metabolic acidosis, convulsions and coma may occur. If the patient survives, symptoms of acute liver necrosis may develop and could lead to death due to hepatic coma.
Inhalation	Dust is irritating to the respiratory tract. Symptoms may include coughing and shortness of breath. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.
Skin	Dust may cause mechanical irritation.
Eye	May cause mechanical irritation.
Carcinogenicity	Ferric oxide [1309-37-1] is evaluated in the IARC Monographs (Vol. 1, Suppl. 7; 1987) as Group 3: Not classifiable as to carcinogenicity to humans.
Chronic Effects	Long term inhalation exposure to iron has resulted in mottling of the lungs, a condition referred to as siderosis. On x-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis-producing materials such as silica. Liver damage, coma and death have been recorded after chronic poisoning. Long term eye exposures may stain the eyes and leave a 'rust ring'.

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Mutagenicity No evidence of mutagenic effects.

12. Ecological information

Ecological Information If the product does not react to form water-soluble compounds, then - due to poor solubility - no ecological problems are to be expected. No ecological problems are to be expected when the product is handled and used with due care and attention.
This substance is not expected to be hazardous to the environment. Practically insoluble in water, it is able to be separated by almost any filtration and sedimentation process.

Ecotoxicity Quantitative data on the ecological effect of this product are not available.

Other Adverse Effects When iron ions flocculate in an alkaline medium, mechanical damage occurs in aquatic organisms.

Acute Toxicity - Fish LC50 (Golden Orfe, Leuciscus Idus): >1000 mg/L.
The following applies to dissolved iron compounds in general: fish: toxic as from 0.9 mg/l at pH 6.5 - 7.5; lethal as from 1 mg/l at pH 5.5 - 6.7; 50 mg/l iron upper limit for fish life.

Acute Toxicity - Bacteria Pseudomonas Putida: >1000 mg/l no harmful effect.

13. Disposal considerations

Disposal Considerations Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. Regulatory information

Regulatory Information Listed in the Australian Inventory of Chemical Substances (AICS).

Poisons Schedule Not Scheduled

16. Other Information

Literature References

'Standard for the Uniform Scheduling of Medicines and Poisons No. 6', Commonwealth of Australia, February 2015.
Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997.
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011.
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.
Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.
Safe Work Australia, 'Hazardous Substances Information System, 2005'.
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'.
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]'.

Contact Person/Point Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT:
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Empirical Formula & Structural Formula Fe2 O3

...End Of MSDS...

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