

MATERIAL SAFETY DATA SHEET

Product Name **IRON ORE (TERRITORY IRON LIMITED)**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name TERRITORY IRON LIMITED
Address Suite 4, 11 Colin Street, West Perth WA, 6005, Australia
Telephone (08) 9483 5100
Fax (08) 9483 5111

Synonyms TERRITORY IRON LIMITED IRON ORE.

Uses STEEL PRODUCTION.

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	Conc.	CAS No.
SILICA, CRYSTALLINE - QUARTZ	Si-O2	7.09%	14808-60-7
PHOSPHORUS (P)	P	0.1%	7723-14-0
IRON ORE (% AS IRON)		61.1%	Not Available
WATER	H2O	4%	7732-18-5
ALUMINIUM OXIDE	Al2O3	2.9%	1318-23-6
ADDITIVES		Remainder	Not Available

4. FIRST AID MEASURES

Eye Flush gently with running water. Seek medical attention if irritation develops.

Inhalation If over exposure occurs, leave exposure area immediately. Seek medical attention if symptoms develop.

Skin Gently flush affected areas with water.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.

Advice To Doctor Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability Non flammable. May evolve toxic gases/ fumes (iron oxides) when heated to decomposition. May also evolve silicon oxides when heated to decomposition.

Fire and Explosion Non flammable. Evacuate area and contact emergency services. Toxic gases (iron oxides) may be evolved when heated to decomposition. Remain upwind and notify those downwind of hazard. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

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5. FIRE FIGHTING MEASURES cont.

Extinguishing Non flammable.

Hazchem Code None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage Collect and reuse where possible.

7. HANDLING AND STORAGE

Handling Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (eg. if container is damaged).

Storage No special requirements for the storage of this product.

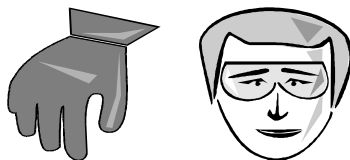
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Use with adequate natural ventilation. Where a dust inhalation hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

Exposure Standards SILICA, CRYSTALLINE - QUARTZ (14808-60-7)
ES-TWA : 0.1 mg/m³ (Silica Quartz, respirable, NOHSC)
ES-TWA# : 0.1 mg/m³ (QLD); 0.15 mg/m³ (NSW)
WES-TWA : 0.2 mg/m³

PHOSPHORUS (P) (7723-14-0)
ES-TWA : 0.1 mg/m³ Phosphorus (yellow)
WES-TWA : 0.1 mg/m³

PPE Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear coveralls. At high dust levels, wear a Class P1 (Particulate) Respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: RED/BROWN LUMPS
Odour: EARTHY ODOUR
pH: NOT AVAILABLE
Vapour Pressure: NOT AVAILABLE
Vapour Density: NOT AVAILABLE

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9. PHYSICAL AND CHEMICAL PROPERTIES cont.

Boiling Point: NOT AVAILABLE
Melting Point: NOT AVAILABLE
Evaporation Rate: NOT AVAILABLE
Solubility (water): INSOLUBLE
Specific Gravity: 2.2
% Volatiles: NOT AVAILABLE
Flammability: NON FLAMMABLE
Flash Point: NOT RELEVANT
Upper Explosion Limit: NOT RELEVANT
Lower Explosion Limit: NOT RELEVANT
Autoignition Temperature: NOT AVAILABLE

10. STABILITY AND REACTIVITY

Reactivity Incompatible with strong acids (eg. hydrochloric acid).

Decomposition Products May evolve toxic gases/ fumes (iron oxides) when heated to decomposition. May also evolve silicon oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Low irritant. Use safe work practices to avoid eye or skin contact and dust inhalation. Chronic exposure to respirable sized particles may cause iron ore to reside in the lungs, resulting in a benign pneumoconiosis (siderosis) which does not appear to affect respiratory function. Due to product form and particle size, adverse health effects are greatly reduced as an inhalation hazard is not anticipated. Due to the product form and particle size of this product, adverse health effects are considered unlikely.

Eye Low irritant. Exposure to dust/ powder may result in mechanical irritation.

Inhalation Low irritant. Over exposure to respirable sized particles at high levels may result in mucous membrane irritation of the nose and throat. Chronic over exposure may cause a benign lung pneumoconiosis known as siderosis. Iron ore particles may remain in the lung when inhaled, however respiratory function is not normally affected.

Skin Low irritant. Prolonged and repeated contact may result in irritation due to mechanical action.

Ingestion Low toxicity. Ingestion of large quantities may result in gastrointestinal irritation, nausea and vomiting. However, due to product form, ingestion is considered unlikely.

Toxicity Data SILICA, CRYSTALLINE - QUARTZ (14808-60-7)
Carcinogenicity : Classified as a human carcinogen (IARC Group 1)

PHOSPHORUS (P) (7723-14-0)
LD50 (Ingestion) : 3030 ug/kg (rat)

12. ECOLOGICAL INFORMATION

Environment The main component/s of this product occur naturally in the earth's crust. It is not anticipated to cause any adverse effects to plants or animals.

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Reuse where possible. No special precautions are required for this product.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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

UN Number None Allocated

DG Class None Allocated

Subsidiary None Allocated

Risk(s)

Packing Group None Allocated

Hazchem Code None Allocated

15. REGULATORY INFORMATION

AICS All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

16. OTHER INFORMATION

Additional Information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

COLOUR RATING SYSTEM: Chem Alert reports are assigned a colour rating of Green, Amber or Red for the purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all Chem Alert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the

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16. OTHER INFORMATION cont.

availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

ABBREVIATIONS:

mg/m³ - Milligrams per cubic metre

ppm - Parts Per Million

TWA/ES - Time Weighted Average or Exposure Standard.

CNS - Central Nervous System

NOS - Not Otherwise Specified

pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

M - moles per litre, a unit of concentration.

IARC - International Agency for Research on Cancer.

**Report
Reviewed** 19th July 2006

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Report Status Chem Alert reports are compiled as an independent source of information by RMT's scientific department. The information is based on the latest chemical and toxicological research, and in compliance with relevant standards, guidance notes and legislation (where applicable). The Chem Alert report is not intended as a replacement to the manufacturer's original MSDS that is provided to Chem Alert subscribers for convenience. In many instances, Chem Alert reports are compiled on behalf of manufacturers, in which case they serve as the "Manufacturer's MSDS" and are clearly identified as such on the relevant reports.

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