



SAFETY DATA SHEET

CRUZOR ILMENITE SAND

Infosafe No.: LQ4OG
ISSUED Date : 10/08/2015
ISSUED by: SIBELCO NEW ZEALAND
LIMITED

1. IDENTIFICATION

GHS Product Identifier

CRUZOR ILMENITE SAND

Company Name

SIBELCO NEW ZEALAND LIMITED

Address

4 - 8 Pavilion Drive Mangere
Auckland 2022 New Zealand

Telephone/Fax Number

Tel: 64 (09) 914 7010

Fax: 64 (09) 9147014

Emergency phone number

0800 154 666 (24hrs)

Recommended use of the chemical and restrictions on use

Raw material for manufacture of titanium dioxide pigments, titanium metal and welding rod electrodes.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433: 2012 Transport of Dangerous Goods on Land.

6.5A - Substance that is a respiratory sensitiser

6.8B - Substance that is suspected to be a human reproductive or developmental toxicant

Signal Word (s)

DANGER

Hazard Statement (s)

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H361 Suspected of damaging fertility or the unborn child.

Pictogram (s)

Health hazard

**Precautionary statement – Prevention**

P103 Read label before use.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P281 Use personal protective equipment as required.
 P285 In case of inadequate ventilation wear respiratory protection.

Precautionary statement – Response

GENERAL

P308+P313 IF exposed or concerned: Get medical advice/ attention.

INHALATION

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary statement – Storage

P405 Store locked up.

Precautionary statement – Disposal

P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Composition

Contains <0.1% respirable crystalline silica in the form of quartz.

Ingredients

Name	CAS	Proportion
Ilmenite	12789- 64- 9	> 97 %
Crystalline Silica (Quartz)	14808- 60- 7	<1 %
Other minerals	Mixture	<2 %
Chromium	7440- 47- 3	0. 2 %

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (0800 764 766)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use appropriate fire extinguisher for surrounding environment.

Unsuitable Extinguishing Media

Not available

Hazards from Combustion Products

Non combustible material.

Specific Hazards Arising From The Chemical

The product is not combustible.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Increase ventilation. Evacuate all unprotected personnel. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid inhalation of dust, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Crystalline Silica (Quartz)

TWA: 0.2 mg/m³ (respirable)

Chromium metal

TWA: 0.5 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Solid

Appearance

Black sand

Colour

Black

Odour

Odourless

Decomposition Temperature

Not available

Melting Point

>2000°C

Boiling Point

Not available

Solubility in Water

Insoluble at 20°C

Specific Gravity

4.2-4.3

pH

7.1-8.8

Vapour Pressure

Not available

Vapour Density (Air=1)

Not available

Evaporation Rate

Not available

Odour Threshold

Not available

Viscosity

Not available

Partition Coefficient: n-octanol/water

Not available

Density

Bulk density: 2400-2700kg/m³

Flash Point

Not available

Flammability

Non-combustible solid

Auto-Ignition Temperature

Not available

Explosion Limit - Upper

Not available

Explosion Limit - Lower

Not available

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Not available

Conditions to Avoid

Extremes of temperature and direct sunlight. Moisture.

Incompatible materials

Not available

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes.

Possibility of hazardous reactions

Not available

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this product.

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of dusts may irritate the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Skin contact may cause mechanical irritation resulting in redness and itching.

Eye

Eye contact may cause mechanical irritation. May result in mild abrasion.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

This product contains crystalline silica. Crystalline Silica (respirable size $\leq 7 \mu\text{m}$) has been classified by the International Agency for Research on Cancer (IARC) as Carcinogenic to Humans (Group 1).

Chromium, metallic is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Suspected of damaging fertility or the unborn child. Classified as a suspected human reproductive or developmental toxicant.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

Other Information

RADIATION: In common with many naturally occurring mineral products, this product contains extremely low levels of naturally occurring radioactive elements - principally uranium and thorium. The main radiological hazard from the product is internal exposure to alpha particles given off in small amounts by inhaled dust. Low level gamma radiation from bulk or bagged stockpiles may present a lesser, external hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No ecological data are available for this material.

Persistence and degradability

Not available

Mobility

Insoluble in water at 20°C

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose directly into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport:

Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433: 2012 Transport of Dangerous Goods on Land.

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

MARPOL:

The product does not meet the conditions to be considered 'harmful to the marine environment' under the revised MARPOL Annex V.

U.N. Number

None Allocated

UN proper shipping name

None Allocated

Transport hazard class(es)

None Allocated

IMDG Marine pollutant

No

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

Group Standard: Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006

HSNO Approval Number

HSR002503

Other Information

The regulations pertaining to radiological protection vary from country to country. It is the responsibility of the buyer to ensure that those regulations are met in accordance with his/her country's laws.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Created: August 2015

References

Workplace Exposure Standards and Biological Exposure Indices.

Transport of Dangerous goods on land NZS 5433.

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).

Assigning a hazardous substance to a group standard.

American Conference of Industrial Hygienists (ACGIH).

END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.