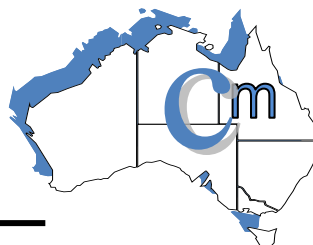


Currumbin Minerals Pty Ltd



ABN 78 009 729 015

Registered Office: 20 Wheeler Crescent, Currumbin Queensland 4223
Postal Address: P.O. BOX 31, CURRUMBIN, QLD, 4223 PH: 61 7 5534 7255 FAX: 61 7 5534 7591

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product name RUTILE SAND PRODUCT

Synonyms RUTILE

Uses and uses advised against

Uses RAW MATERIAL

Predominantly used as a raw material for chloride titanium dioxide pigment Manufacture. Also used in titanium metal production and welding rod fluxes.

Details of the supplier of the product

Supplier Name: Currumbin Minerals

Address 20 Wheeler Crescent, Currumbin Waters, Queensland 4223

Telephone +61 7 5534 7255

Emergency telephone numbers

Emergency 0439 155 514 (8:00 to 17:00 EST)

Poison Information 13 11 26

Centre

2. HAZARDS IDENTIFICATION

Emergency overview

Dark brown to grey granular solid. Odourless. Non-flammable.

Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS UNDER OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
RUTILE AND LEUCOXENE	-	-	> 99%
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	238-878-4	<0.1%
ZIRCON	14940-68-2	239-019-6	<1.5%
KYANITE	1302-76-7	215-106-4	0.5%
ILMENITE	103170-28-1	-	<1%
MONAZITE	1306-41-8	-	<0.1%

Ingredient Notes Respirable Crystalline Silica < 0.01%.

4. FIRST AID MEASURES

Description of first aid measures

Eye If in eyes, rinse cautiously with water for several minutes, or until particle is removed. Remove contact lenses if present and easy to do - continue rinsing.

Inhalation If inhaled move to fresh air and keep comfortable.

Skin If skin or hair contact occurs, brush off loose particles. If on clothing, brush off loose particles. If irritation occurs, seek medical advice.

Ingestion If swallowed, rinse mouth and get medical attention if you feel unwell.

First aid facilities Eye wash facilities should be available.

Most important symptoms and effects, both acute and delayed

See section 11 for more detailed information on health effects and symptoms.

Specific advice for doctors

Treat symptomatically

5. FIRE FIGHTING MEASURES

Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Non-flammable. May evolve toxic gases if strongly heated.

Precautions and protective measures for fire fighting

No fire or explosion hazard exists.

Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment, and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.
Contact emergency services where appropriate.

Environmental precautions

Prevent product from entering drains and waterways

Methods of cleaning and suggested disposal materials

Contain spillage, then collect and place in suitable containers for reuse or disposal,
avoid generating dust

Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE**Precautions for safe 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.

Conditions for safe storage

Store in a well-ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage, and sealed when not in use. When stockpiled, ensure leachate and runoff cannot enter drains or waterways.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure standards**

Ingredient	Reference	TWA		STEL	
Respirable Crystalline Silica	OSHA PEL (USA)	-	0.05	-	--
Titanium Oxide	ACGIH TLV (USA)	-	10	-	--
Zirconium and Compounds, as Zr	NHFPC (CHINA)	-	5	-	10
Zirconium compounds	SWA (AUS)	-	5	-	10

Biological limits

No biological limit values have been entered for this product.

Engineering controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

Personal protective equipment

Eye / Face Wear safety glasses and if there is a potential for dust, wear dust-proof goggles.

Hands Wear industrial grade gloves when handling material.

Body Where heavy contamination is likely, wear coveralls.

Respiratory 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	DARK BROWN TO GREY GRANULAR SOLID
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	1825°C
Evaporation rate	NOT AVAILABLE
pH	NEUTRAL
Vapour density	NOT AVAILABLE
Specific gravity	4.0 to 4.3
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE
Other information	
Bulk density	2300 to 2700 kg/m ³

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended conditions of storage.

Possibility of hazardous reactions

Polymerization is not expected to occur.

Conditions to avoid

Avoid contact with incompatible substances.

Incompatible materials

Incompatible with acids (e.g. nitric acid).

Hazardous decomposition products

May evolve toxic gases when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Non-toxic. There are no known hazards resulting from accidental ingestion of this product as may occur during normal handling. Ingestion of large quantities may cause irritation to the gastrointestinal system, mainly as a result of abrasion.

Skin

Not classified as a skin irritant. Contact may result in mechanical irritation.

Eye

Not classified as an eye irritant. Contact may result in mechanical irritation.

Sensitisation

This product is not known to be a skin or respiratory sensitiser.

Mutagenicity No evidence of mutagenic effects

Carcinogenicity

This product contains a small amount of respirable crystalline silica and precautions should be taken to avoid inhaling the dust. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). The normal grain size of the product precludes it from being an inhalation hazard.

Reproductive toxic Not classified as a reproductive toxin.

STOT - single exposure No known effects from this product.

STOT – repeated exposure

The normal grain size of the product precludes it from being an inhalation hazard. This product contains a small amount of respirable crystalline silica and precautions should be taken to avoid inhaling the dust.

Radiation

This product contains low levels of naturally occurring radioactive elements of the uranium and thorium series. Low level gamma radiation from bulk or bagged stockpiles of the product can increase gamma levels slightly above normal background.

Aspiration hazard This product does not present an aspiration hazard.

12. ECOLOGICAL INFORMATION**Toxicity**

The material is unlikely to cause any environmental damage. It is insoluble in water and is unlikely to contaminate waterways or food chains.

Persistence and degradability

Not applicable.

Mobility in soil

This product has low mobility in soil.

Bioaccumulative potential

This product is not expected to bioaccumulate.

Mobility in soil

This product has low mobility in soil.

Results of PBT and vPvB assessment

No information provided.

Other adverse effects

No information provided

13. DISPOSAL CONSIDERATIONS**Waste materials and contaminated packaging**

Disposal must be in accordance with Federal, State and Local Council regulations. If approved, may be transferred to an approved landfill site. Many states are developing new regulations for the disposal of waste containing Naturally Occurring Radioactive Materials (NORM) or Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) above background levels. Consult and comply with current regulations.

Disposal considerations

Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

	Land Transport (DOT)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
UN Number	None Allocated	None Allocated	None Allocated
Proper Shipping Number	None Allocated	None Allocated	None Allocated
Transport hazard Group	None Allocated	None Allocated	None Allocated
Packing Group	None Allocated	None Allocated	None Allocated

Environmental hazards

No information provided

Special precautions for user

15. REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture

US EPCRA and CAA Regulatory Information

The following components are subject to the Emergency Planning and Community Right-to-know (EPCRA) and Section 112® of the Clean Air Act (CAA):

None of the components of this product are listed on the SARA/CERCLA/CASA lists.

Carcinogenicity

The following components are reported to be carcinogenic:

Ingredient	CAS Number	NTP	IARC	OSHA
QUARTZ (CRYSTALLINE SILICA)	14808-60-7	Known	Group 1	Regulated

TSCA

The following components are not listed on the TSCA Inventory list:

Ingredient	CAS Number
MONAZITE	1306-41-8

Inventory listings

AUSTRALIA: AICS (Australian Inventory of Chemical Substances)

All components are listed on AICS or are exempt.

UNITED STATES: TSCA (US Toxic Substances Control Act)

All components are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

Additional information

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: 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).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the 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: form of product; 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 report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAA	Clean Air Act
CAS	# Chemical Abstract Service number - used to uniquely identify chemical compounds
CERCLA	Comprehensive Environmental Response, compensation, and Liability Act
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPCRA	Emergency Planning and Community Right -to-know Act
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and health Administration
PEL	Permissible Exposure Limit
pH	Relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline.)
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity measured in pounds (304, CERCLA)
SARA	Superfund Amendments and Reauthorisation Act

STEL Short-Term Exposure Limit

STOT-RE Specific target organ toxicity (repeated exposure)

STOT-SE Specific target organ toxicity (single exposure)

TLV Threshold Limit Value

TPQ Threshold Planning Quantity measured in pounds (302)

TQ Threshold Quantity measured in pounds (CAA)

TWA Time Weighted Average

Report status

This document has been compiled on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness, no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

Version 1
21/11/2020

End Of SDS