

1. IDENTIFICATION OF MATERIAL SUPPLIER

Product Names: **Leucoxene L88**

Other Names: Leucoxene, L88, L91, Altered Ilmenite, Low Grade Rutile, Titanium Ore Concentrate

Uses: Leucoxene is used predominantly as a raw material for titanium dioxide pigment used in paints and cosmetics. Leucoxene is also used in titanium metal production for aircraft components, medical applications (artificial joints and limbs), sporting equipment and watches and in the manufacture of welding electrodes.

Company: Keysbrook Leucoxene Pty Ltd
ABN 49 137 091 297

Address: 1 Alumina Road, East Rockingham WA 6168

Telephone: +61 8 9725 5444

Fax: +61 8 9725 4757

2. HAZARDS IDENTIFICATION

Not classified as hazardous according to criteria of Australian Safety and Compensation Council (ASCC).

Risk Phrases None

Safety Phrases None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients (typical)	Cas No	Weight
Rutile/Anatase/Leucoxene	1317-80-2 / 13463-67-7 / NA	87-90%
Quartz	14808-60-7	2-5%
Zircon	14940-68-2	1-2%
Uranium (U)	7440-61-1	1-30ppm
Thorium (Th)	7440-29-1	180-250ppm
Ferric Oxide	1309-37-1	2-5%
Alumina	1344-28-1	1-3%

4. FIRST AID MEASURES

Swallowed: First aid is unlikely to be required, but if necessary wash mouth out with water ensuring the mouthwash is not swallowed. Give one or two glasses of water to drink. Seek medical attention if a large quantity has been swallowed.

Inhaled: Blow nose to remove particulates from nose. Move to area with fresh air. Seek medical attention if adverse reaction develops.

Skin: Remove contaminated clothing gently to avoid creating dust. Wash skin. If skin becomes irritated, seek medical attention. Launder affected clothing before re-use.

Eye: Hold eyelid open and flush with clean water. Continue until grit is removed. Seek medical attention if irritation or soreness persists.

Acute

Swallowed: Non-toxic. No known detrimental effect from accident ingestion as may occur during normal handling. Ingestion of

SAFETY DATA SHEET

LEUCOXENE L88



large amounts may cause irritation to the gastro-intestinal system due to abrasiveness.

Inhaled: Mainly regarded as nuisance dust but may be irritating if inhaled at high concentrations. May cause coughing and/or sneezing.

Skin: Low hazard.

Eye: Can cause irritation due to abrasiveness.

Chronic

Radiation: In common with many minerals, leucoxene 88 contains naturally occurring radioactive elements of the uranium and thorium series. The uranium and thorium levels of Keysbrook Leucoxene Pty Ltd leucoxene is very low, compared with products produced from most mineral sands deposits elsewhere in Australia. Assays of leucoxene 88 have given levels for Uranium of 10 – 20ppm, and for Thorium of 200 – 250ppm. The main radiological hazard is internal exposure to alpha particles given off in small amounts in inhaled dust.

Silica: Crystalline silica is a known cause of lung fibrosis (silicosis). It has also been classified as a human carcinogen. Leucoxene L88 and L91 sand may contain a small amount of free quartz and precautions should be taken to avoid inhaling the dust.

FIRST AID FACILITIES Eye Wash Station

DOCTOR Treat symptomatically

5. FIRE FIGHTING MEASURES

Non-flammable, non-combustible

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Not relevant

Containment and Clean-up: Wear safety equipment for normal handling. Avoid generating dust. Vacuum up if possible, otherwise sweep up and recycle. If the spilled product is not suitable for re-use, dispose of to an approved landfill site and cover with clean fill.

7. HANDLING AND STORAGE

Handling: Dust generation should be minimised when handling. Wash thoroughly after handling.

Storage: Storage areas should be ventilated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards: Dust TWA-10mg/m³ (inhalable general nuisance dust)

Biological Limit Values: No information

Engineering Controls: Ventilation requirements will depend on handling methods and the amounts in use, but should be sufficient to maintain dust levels below exposure limits.

Personal Protective Equipment: Safety glasses or goggles. If there is a risk of inhaling dust, wear an approved respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brownish free running sand

Odour: Odourless

pH: 7.1

Vapour Pressure: Not applicable

Boiling Point/Range: Not applicable

Melting Point: > 1500°C

Solubility: Insoluble

Bulk Density: 1.8 – 2.0

Stowage Factor: 0.53 ~ 0.58 m³/t

Angle of Repose: 30°

SAFETY DATA SHEET

LEUCOXENE L88



Flash Point: Not applicable
Flammability Limits: Not applicable

10. STABILITY AND REACTIVITY

Reactivity	Inert
Chemical Stability:	Stable
Incompatible Materials	None in normal or expected use
Decomposition Products	Decomposition will not occur

11. TOXICOLOGICAL INFORMATION

Not classified as hazardous to human health according to criteria of GHS (UN 2017)

12. ECOLOGICAL INFORMATION

Does not meet the conditions to be considered "harmful to the marine environment" under the revised MARPOL annexe V.

13. DISPOSAL CONSIDERATIONS

If not re-useable, dispose of at approved landfill site. Disposal must be in accordance with Commonwealth, State and local government regulations.

14. TRANSPORT INFORMATION

Transport may be regulated in some countries although the product is not regarded as a transport hazard. Trucks however should be covered when transporting dry bulk product to prevent dust creation.
Is not classifiable as a class 9 miscellaneous dangerous good for marine transport

15. REGULATORY INFORMATION

Poisons Schedule: None allocated

16. OTHER INFORMATION

Date of Issue: 30 August 2019
Replaces Issue: December 11, 2017
Review Date: March 2022

END OF SAFETY DATA SHEET