

UNIVERSAL GRADE SPODUMENE MATERIAL SAFETY DATA SHEET

Date issued: August 2002

Section 1 - General

Product: Universal Grade Spodumene

Trade Name: Universal Grade Spodumene

Producer: Sons of Gwalia Ltd

> 16 Parliament Place West Perth 6005 Western Australia

Telephone: (61 8) 9263 5555 Facsimile:

(61 8) 9481 1271

Section 2 - Chemical and Physical Data

Description of Material: Mixture of naturally occurring silicates and quartz.

75% Major Constituents: Spodumene [LiAl(Si₂0₆)]

<25% Quartz (SiO₂)

Moist coarse sand (1-6mm) Appearance:

Colour: White to beige

Smell: Odourless

Specific Gravity: 3.1

1.6 tonnes/m³ (wet) Bulk Density:

Moisture Content: <10% H₂O

ADVANCED MINERALS DIVISION

16 Parliament Place, Locked Bag 16, West Perth, Western Australia 6872

Molecular Weight: Not applicable, complex mixture of minerals

Melting Point: Incipient fusion at 1375°C

Boiling Point: N/A

Solubility: Insoluble in water and common dilute acids.

Soluble in Hydrofluoric Acid.

Section 3 - Physical Hazards

Material is non-combustible, non-reactive, stable.

Section 4 - Health Hazard Data

Toxicity: Material is inert and non-toxic.

Dust: Should be treated as other products containing quartz. TLV

Total Dust 10 mg/m³, TLV Respirable Dust 5 mg/m³. TLV Silica Dust 0.2 mg/m³. Prolonged and repeated exposure to

dust may cause silicosis.

First Aid: **Eyes**: Flush with water for at least 15 minutes with eyelids

open.

Skin: Wash well with water and soap.

Inhalation: Remove person to fresh air. Consult with

physician.

Potential for

Carcinogenicity: Spodumene is not listed as a carcinogen or potential

carcinogen by the National Toxicology Program of the US Public Health Service, nor has it been found to be a carcinogen or potential carcinogen by OSHA or the International Agency for Research for Cancer. There are low levels of quartz in this product and silica/quartz is classified as carcinogenic to humans (IARC Group 1). Where respirable dust levels are controlled its potential for

adverse health effects is minimised.



Section 5 - Spill or Leak Procedures

Should be cleaned up by methods appropriate for dusty materials and disposed of in compliance with federal, provincial/state and local laws as they apply to non-hazardous material.

Section 6 - Handling Precautions

Respiratory Protection: NIOSH/MSHA approved respirator is recommended when

working in dusty conditions.

Eyes and Face: Safety glasses are recommended when any possibility of

dust particles entering the eyes exists.

Other Protective Clothing: Gloves and other protective clothing may be worn if contact

is appreciable.

Section 7 - Hazard Rating Summary

Health: Slight Flammability: Minimal Reactivity: Minimal

Personal Protection: Dust Respirator and Safety Glasses

Section 8 - Use of this Data

The data in this material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data that Sons of Gwalia Ltd believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a licence to operate under or a recommendation to infringe any patents. Any use of these data and information must be determined by the user to be in accordance with Federal, State and Local laws and regulations.

