

NAGROM
the mineral processors

A.C.N. 008 868 335
A.B.N. 55 008 868 335

T: 08 9399 3934
F: 08 9497 1415

PO Box 66
Kelmscott WA 6991

49 Owen Road,
Kelmscott WA 6111

MATERIAL SAFETY DATA SHEET

SPODUMENE SAMPLE

Section 1 – Material and Supplier Identification

Product Name:	Spodumene sample
Supplier:	Nagrom
Address:	49 Owen Road, Kelmscott WA 6111
Telephone:	(08) 9399 3934
Fax:	(08) 9497 1415
Emergency:	
Web Site:	www.nagrom.com.au
Use:	Lithium source – ore processing An inorganic material used in manufacturing of ceramics, glass, glazes, foundry, steel aluminium and lithium products
SDS Date:	24 February 2017

Section 2 – Hazards Identification

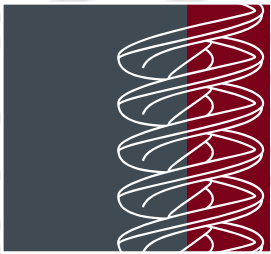
NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA	
Risk Phrases:	None allocated
Safety Phrases:	None allocated
NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE	
UN Number:	None allocated
Packing Group:	None allocated
Transport Hazard Class	None allocated
Hazchem Code:	None allocated

Section 3 – Compositing/Information on Ingredients

Ingredient	CAS Number	EC Number	Content
QUARTZ (CRYSTALLINE SILICA)	148108-60-7	238-878-4	5-10%
SPODUMENE	-	-	75-85%
FELDSPAR-GROUP MINERALS	68476-25-5	270-666-7	<20%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

Section 4 – First Aid Measures

Eye:	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
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Inhalation:	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion:	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting
Advice to doctor:	Treat symptomatically.

Section 5 – Fire Fighting Measures

Flammability:	Non-flammable. May evolve toxic gases if strongly heated.
Fire and Explosion:	No fire or explosion hazard exists.
Extinguishing:	Use an extinguishing agent suitable for the surrounding fire.
Hazchem Code:	None allocated.

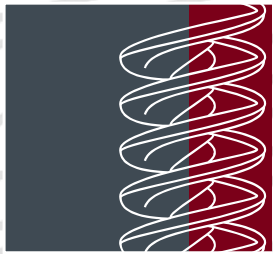
Section 6 – Accidental Release Measures

Personal precautions:	Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Contact emergency services where appropriate.
Environmental precautions:	Prevent product from entering drains and waterways.
Methods of cleaning up:	Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust
References	See Sections 8 and 13 for exposure controls and disposal.

Section 7 – Storage and Handling

Storage:	Store in a cool, dry, well-ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use
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.

For further information regarding this material please contact:



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Section 8 – Exposure Controls/Personal Protection

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Quartz (Respirable dust)	SWA (AUS)	-	0.1	-	-
Biological Limits:		No biological limit allocated.			
Engineering Controls:		Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.			
PPE					
Eye/Face:		Wear dust-proof goggles.			
Hands:		Wear PVC or rubber gloves.			
Body:		When using large quantities or where heavy contamination is likely, wear coveralls			
Respiratory:		Where an inhalation risk exists, wear a Class P1 (Particulate) respirator. At high dust levels, wear a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter or a Full-face Class P3 (Particulate) respirator.			



Section 9 – Physical and Chemical Properties

Appearance	Granular solid
Odour	Very faint fatty odour
Flammability	Non flammable
Flash point	Not relevant
Boiling point	Not relevant
Melting point	Not relevant
Evaporation rate	Not relevant
pH	Not relevant
Vapour density	Not available
Specific gravity	3
Solubility (water)	Insoluble
Vapour pressure	Not relevant
Upper explosion limit	Not relevant
Lower explosion limit	Not relevant
Partition coefficient	Not available
Auto ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Oxidising properties	Not available
Odour threshold	Not available



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Section 10 – Stability and Reactivity

Chemical stability:	Stable under recommended conditions of storage
Conditions to avoid:	Avoid contact with incompatible substances
Material to avoid:	Incompatible with acids (e.g. nitric acid).
Hazardous decomposition products:	May evolve toxic gases if heated to decomposition
Hazardous reactions	Polymerization is not expected to occur

Section 11 – Toxicological Information

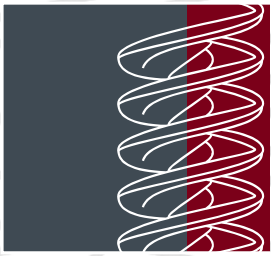
Health hazard summary	Low toxicity. Under normal conditions of use, adverse health effects are not anticipated. Adverse health effects associated with silica, such as the development of silicosis (lung fibrosis) are not anticipated, unless respirable quartz dust is created and chronic exposure occurs.
Eye	Low to moderate irritant. Contact may result in mild irritation, lacrimation and redness
Inhalation	Irritant. Over exposure may result in irritation of the nose and throat, with coughing. Avoid dust generation / inhalation
Skin	Low irritant. Prolonged or repeated exposure to dust may result in mechanical irritation and dermatitis
ingestion	Low toxicity. Ingestion may result in gastrointestinal irritation, nausea and vomiting. However, due to product form ingestion is considered unlikely
Toxicity data	No LD50 data available for this product

Section 12 – Ecological Information

Toxicity	This product is not anticipated to cause adverse effects to animal or plant life if released to the environment in small quantities
Persistence and degradability	Not applicable
Bioaccumulative potential	This product is not expected to bioaccumulate
Mobility in soil	This product has low mobility in soil
Other adverse effects	No information provided

Section 13 – Disposal Considerations

Waste disposal	Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer/supplier for additional information (if required)
Legislation	Dispose of in accordance with relevant local legislation



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Section 14 – Transport Information

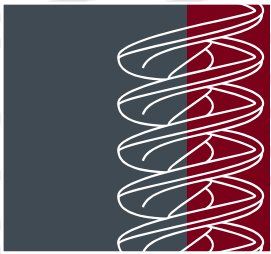
	Land Transport (ADG)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
UN Number	None allocated	None allocated	None allocated
Proper shipping name	None allocated	None allocated	None allocated
Transport hazard class	None allocated	None allocated	None allocated
Packing group	None allocated	None allocated	None allocated
Environmental hazards	No information provided		
Special precautions for user			
Hazchem code	None allocated		

Section 15 – Regulatory Information

Poison schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Inventory listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt

Section 16 – Other Information

Additional information	<p>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</p>
	<p>PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as 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</p>
	<p>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 ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate</p>



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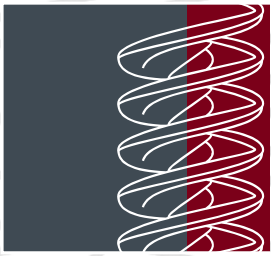
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Abbreviations	ACGIH American Conference of Governmental Industrial Hygienists
	CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS Central Nervous System
	EC No. EC No - European Community Number
	EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
	GHS Globally Harmonized System
	GTEPG Group Text Emergency Procedure Guide
	IARC International Agency for Research on Cancer
	LC50 Lethal Concentration, 50% / Median Lethal Concentration
	LD50 Lethal Dose, 50% / Median Lethal Dose mg/m ³ Milligrams per Cubic Metre
	OEL Occupational Exposure Limit
	pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm Parts Per Million
	STEL Short-Term Exposure Limit
	STOT-RE Specific target organ toxicity (repeated exposure)
	STOT-SE Specific target organ toxicity (single exposure)

Report status	<p>This document has been compiled by Nagrom on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').</p> <p>It is based on information concerning the product which has been provided to Nagrom 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</p>
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	<p>clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.</p> <p>While Nagrom has taken 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. As far as lawfully possible, Nagrom accepts 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.</p>
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