

SAFETY DATA SHEET

RYANWOOL



Section 1. Identification of the material and the supplier

Product: **Ryanwool**
Product Use: Application as thermal insulation, heat containment, heat shields, gaskets and expansion joints in industrial ovens, furnaces, kilns, boilers and other process equipment and in the aerospace, automotive and appliance industries, and as passive fire protection systems and firestops.
Restriction of Use: Refer to Section 15
New Zealand Supplier: **RYANFIRE Products**
Address: 11 Ashfield Road
Wairau Valley
Auckland, 0627
Telephone: +64 9 443 0362
Emergency No: 0800 764 766 (National Poison Centre)
Date of SDS Preparation: 9 August 2024 v1.1

Section 2. Hazards Identification

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
AES wool (synthetic fibres, alkaline earth silicate)	To 100	436083-99-7*

* CAS definition: Alkaline earth silicate (AES) consisting of silica (50-82 wt. %), calcia and magnesia (18-43 wt. %), alumina, titania and zirconia (less than 6 wt. %), and trace oxides. None of the components is radioactive under the terms of European Directive Euratom 96/29.

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: In case of eye contact flush abundantly with water; have eye bath available. Do not rub eyes.
If on Skin: Handling of this material may generate mild mechanical temporary skin irritation. If this occurs, rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.
If Swallowed: Not considered a route of exposure.
If Inhaled: Remove from further exposure. If Cough or other symptoms develop, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: None known.

Section 5. Fire Fighting Measures

Product Name: Ryanwool
Date of SDS: 9 August 2024

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Hazard Type	Non-Flammable/Non-Combustible
Hazards from combustion products	None known
Suitable Extinguishing media	Use extinguishing agent suitable for surrounding combustible materials.
Precautions for firefighters and special protective clothing	Use normal firefighting procedures. Packaging and surrounding materials may be combustible.
HAZCHEM CODE	None Allocated

Section 6. Accidental Release Measures

Where abnormally high dust concentrations occur, provide the workers with appropriate protective equipment as detailed in section 8. Prevent further dust dispersion for example by damping the materials.

Do not flush spillage to drain and prevent from entering natural watercourses.

Pick up large pieces and use a vacuum cleaner. If brushing is used, ensure that the area is wetted down first. Do not use compressed air for clean up. Do not allow being windblown. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling and Storage:

- Handling can be a source of dust emission. The process or processes should be designed to limit the amount of handling.
- Wherever possible, handling should be carried out under ventilation with filtered exhaust.
- Regular good housekeeping will minimise secondary dust dispersal.
- Store in original packaging in a dry area.
- Always use sealed and clearly labelled containers.
- Avoid damaging containers.
- Reduce dust emission during unpacking.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No data available.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14TH EDITION.

Engineering Controls

Review your applications in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example, down draft tables, emission controlling tools and materials handling equipment.

Personal Protection Equipment



Eyes	As necessary, wear goggles or safety glasses with side shields.
Skin	Wear gloves and work clothes, which are loose fitting at the neck and wrists. Soiled clothes should be cleaned to remove excess fibres before being taken off (e.g. use vacuum cleaning, not compressed air).
Respiratory	For dust concentrations below the exposure limit value, RPE is not required but FFP2 respirators may be used on a voluntary basis. For short-term operations where excursions are less than ten times the limit value use FFP2 respirators. In case of higher concentrations or where the concentration is not known, please seek advice from your company and/or local Nutec supplier.

Section 9 Physical and Chemical Properties

Appearance	Fibre
Colour	White
Odour	Odourless
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Fibre Melting Point	>1200°C
Working Temp	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	50 – 240 kg/m ³
Solubility	Less than 1 mg/L
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Other safety information	These fibres are far denser than air or water and will settle rapidly under normal environmental conditions.

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Not available
Incompatible Materials	Not available
Hazardous Decomposition Products	Upon heating above 900°C for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases.

Section 11 Toxicological Information

Exposure is predominantly by inhalation or ingestion. Manmade vitreous fibres of a similar size to AES have not been shown to migrate from the lung and/or gut and do not become located in other organs of the body. Fibres contained in the products listed in the title have been designed

to be rapidly cleared from lung tissue. This low biopersistence has been confirmed in many studies on AES using EU protocol ECB/TM/27(rev 7). When inhaled, even at very high doses, they do not accumulate to any level capable of producing a serious adverse biological effect.

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

These products are insoluble materials that remain stable overtime and are chemically identical to inorganic compounds found in the soil and sediment; they remain inert in the natural environment. No adverse effects of this material on the environment are anticipated.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13. Disposal Considerations

Disposal Method: Waste from these materials may be generally disposed of at a landfill, which has been licensed for this purpose. Taking into account any possible contamination during use, expert guidance should be sought.

Unless wetted, such a waste is normally dusty and so should be properly sealed in containers for disposal. At some authorised disposal sites, dusty waste may be treated differently in order to ensure they are dealt with promptly to avoid them being windblown. Check for any national and/or regional regulations, which may apply.

Precautions or methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020

Section 15 Regulatory Information

This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

Section 16 Other Information

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

Issue Date: 9 August 2024 Review Date: 9 August 2029