SECTION 1: IDENTIFICATION OF THE MATERIAL AND COMPANY

Product Name	:	Stone Wool Insulation
Product Use	:	Thermal and Acoustic Insulation, Fire protection
Product appearance	:	Gray/Yellow color.
		Supplied in slabs, rolls, mats, loose 'granulate' and shaped (eg. preformed pipe sections etc.)
Company name	:	ROCKWOOL (Thailand) Limited
Company address	:	Hemaraj Eastern Industrial Estate (Map Ta Phut)
		1 Soi G 2, Pakornsongkrohraj Road, Huaypong, Muang, Rayong 21150, Thailand
Telephone	:	(+66) 3868 5110
Facsimile	:	(+66) 3868 4938
Website	:	www.rockwoolasia.com
E-mail of person	:	lapha@rockwool.com
responsible for MSDS		
Issue Date	:	13th March 2014
Document No	:	MSDS-001 Rev.02

SECTION 2: HAZARD IDENTIFICATION

The mechanical effect of fibres in contact with the skin can cause a temporary itching. Acrid smoke may be generated during a fire.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Description	CAS - No.	Contents
Mineral wool (amorphous, non-crystalline)	65997-17-3	> 95%
Heat cured urea modified phenol - formaldehydes resin	25104-55-6	Up to 5%
Mineral oil (solvent refined dust suppression agent)	8012-95-1	Up to 0.3%

SECTION 4: FIRST AID MEASURES

Information according to the different exposure route:

Inhalation : Remove from exposure. Rinse the throat and blow nose to clear dust

Skin contact : If itching occurs, remove contaminated clothing and wash skin gently with cold water and soap.

Eyes contact : Rinse abundantly with water for at least 15 minutes.

Ingestion : Drink plenty of water if accidentally ingested.

If any adverse reaction or discomfort continues from any of the above exposures, seek medical professional advice.

Binder gasses:
If eye or respiratory irritation occurs leave source of contamination and get fresh air. Consult a physician if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES

The products are non-combustible and do not pose a fire hazard. Punking may occur at high temperature. Some facings and packing materials may burn.

Suitable extinguishing media : Water, foam, carbon dioxide or dry powder. Water fog may be used to cool intact containers and nearby storage ares.

Extinguishing media that must not be used for safety reasons : None.

Hazards from Combustion products : Stone wool Insulation is non-flammable, but the plastic wrapping, resin binder, and some facing may decompose, smoulder or burn in a fire or when heated above 300^0C. If product is present in fire, toxic gases or smoke may be evolved depending on surrounding fire conditions.

Special protective equipment for fire fighters : Observe normal firefighting procedures.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	:	In case of presence of high concentrations of dust, use the same personal protective equipment as mentioned in section 8.
Environmental protection	:	Not relevant
Methods for cleaning up	:	Clean with vacuum or dampen with water spray prior to sweeping up.

SECTION 7: HANDLING AND STORAGE

Handling : Unpack material at application site to avoid unnecessary handling of product. Keep work areas clean. Dispose of scrap material and debris in suitable containers. Spray with water before sweeping or use vacuum equipment.

Storage : Keep material in original packaging until it is to be used. Store material to protect against damage including the weather.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection:

- **Initial heating up** : When insulation wool is heated to approximately 200℃ for the first time(s), release of binder components and binder decomposition products occurs. The fumes can be detected by their acrid odour and high concentrations of these gasses may irritate the eyes and respiratory system. General dilution ventilation and/or local exhaust ventilation should be provided as necessary to control exposure to fumes when high temperature appliances are first put into service.
- **Fibres** : Workplace exposures limit (WEL) to meet country's requirements on the 8 hour time weighted average gravimetric measure.

  If the WEL is likely to exceeded (for example when using high speed cutting tools or when working in confined spaces) disposable face masks complying with BS EN149 FFP1 or FFP2 should be used and are suitable for most applications.

Hand protection : It is recommended that gloves are worn for comfort. Gloves conforming to EN 388 or similar are recommended.

Eye protection : With heavy dust development or when working with product above head height, the use of safety goggles is advised.

Eye protection conforming to EN 166 or similar are recommended.

Skin protection : No special requirements: loose fitting, long-sleeved, long-legged, work clothes advised. Change clothes and wash on completing work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	A matt of Gray/Yellow fibrous material resembling wool. It is supplied in different shapes and size, in outer packaging. It may be rigid or flexible and facing such as aluminium foil, wire, and synthetic tissue applied to meet specific purposes.
Odour	:	Not applicable
pH (at 1000g/H_2O, 25℃)	:	Neutral or slightly alkaline (pH 7-9)
Boiling point	:	Not applicable
Melting point	:	> 1000℃
Flash point	:	Not applicable
Flammability	:	Not applicable
Auto-flammability	:	A1 non combustible
Explosive properties	:	Not applicable
Oxidizing properties	:	Not applicable
Vapour pressure	:	Not applicable
Fibre density	:	Not applicable
Solubility:	:	Generally chemically inert and insoluble in water
Partition coefficient:	:	Not applicable
Other data:	:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability	:	Stable
Reactivity	:	Not reactive
Thermal decomposition products	:	When insulation wool is heated to approximately 200℃ for the first time(s) binder components and decomposition gases are emitted from the binder. The decomposition starts at approximately 200℃ and the duration of release depends on thickness of insulation, binder content and temperature(s) applied.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute effect	:	The mechanical effect of fibres in contact with the skin can cause a temporary itching.
Respirable fibers	:	According to IARC rock (stone) wool is classified as Group 3, "not classifiable as to its carcinogenicity to humans". (In October 2001, the International Agency for Research on Cancer "IARC", part of the World Health Organization reviewed its 1987 classification of mineral wool fibers and removed them from the list of possible carcinogens).

SECTION 12: ECOLOGICAL INFORMATION

Stable product with no known adverse environmental effects.

SECTION 13: DISPOSAL CONSIDERATIONS

No special precautions	:	Hazardous waste regulations; stone wool insulation is classified as non-hazardous waste. Dispose according to local regulations.
Landfill regulations	:	Stone wool insulation waste is categorized as "waste accepted at landfills for non-hazardous waste".

SECTION 14: TRANSPORT INFORMATION

Not regulated by any transport mode. No special precautions.

SECTION 15: REGULATORY INFORMATION

According to IARC rock (stone) wool is classified as Group 3, "not classifiable as to its carcinogenicity to humans". (In October 2001, the International Agency for Research on Cancer "IARC", part of the World Health Organization reviewed its 1987 classification of mineral wool fibers and removed them from the list of possible carcinogens).

Exposure Limits: Recommended Workplace exposure limit (WEL) to meet country's requirements on the 8 hour time weighted average gravimetric measure.

SECTION 16: FUTHER INFORMATION

Potential Health Effects: IARC Monograph Man-made Vitreous Fibres, press release October 2001 Safety in the Use of Mineral and Synthetic Fibers, Occupational Safety and Health Series International Labor Office (ILO).

This information reflects typical values and is not a product specification. No warranty expressed or implied is hereby made.

Persons *who wish to obtain more detailed information have to contact the producer (address on the first page of this sheet).*

Information *given in this document is on the state of our knowledge regarding this material.*

The attention *of user is drawn to possible risks taken when the product is used for other application than the ones it has been designed for.*

End of MSDS.