LIZMONTAGENS

TECNICAL DATA SHEET

Refractory Insulation & Finishing Spray

LIZSPRAY HT

LIZSPRAY HT belongs to a range of insulating coatings sprayable, recommended for continuous hot face temperature up to 650ºC.

LIZSPRAY HT it is a hydraulic-setting insulating used for insulating irregular surfaces, specially developed for one coating application.

LIZSPRAY HT is used as finishing product over other insulation or refractory brick, advantageous for irregular surfaces and may be applied for one spray application as a thin layer until to 150mm thick. Thicker layers can be applied with a suitable anchor system.

LIZPRAY HT it was developed to be Sprayed mechanically directly on the support, using an appropriate pump, a “dry” Spray Machine.

LIZSPRAY HT it is produced of Man Made Mineral Fibres, fillers and specific binders.

LIZSPRAY HT is totally asbestos and Ceramic fiber free.

Dry density, according to end use:

200 – 300 Kg/m3

Thermal conductivity at mean temperature of:

200ºC: 0.074 W/mK
250ºC: 0.085 W/mK
300ºC: 0.096 W/mK

Packing: 25Kg/bag, 600Kg per Pallet

Direcção Comercial
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LIZSPRAY HT

Other relevant information's:

- Appearance: Grey/White Coloured mixture of fibres and powder;
- Tariff code: 6806 1000;
- Product fabricated with >50% mineral Wool, < 5% of organic binders, and the rest with cement:
  - Chemical composition of the Cement:
    - CaO 60-67 %;
    - SiO_2 17-25 %
    - $Al2O_3$ 3-8 %
    - Fe_2O_3 0.5-0.6 %
    - MgO 0.5-4 %
    - Alkalis 0.3-1.2 %
    - SO_3 2-3.5 %
  - Chemical composition of Mineral Wool
    - SiO_2 35-45 %
    - Al_2O_3 18-23 %
    - TiO_2 0.1-2.5 %
    - Fe_2O_3 0.5-7 %
    - Cao+MgO 25-40 %
    - Na_2O+K_2O 1-5 %
    - Other Oxides 1-3 %
- Time life: 1 year after production date.

LIZMONTAGENS
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MATERIAL SAFETY DATA SHEET (Following Regulations (EC) No 1907/2006 & (EC) No 1272/2008)

1. Identification of product

Comercial Branch: LIZSPRAY

1.1 - Identification of Product

LIZSPRAY HT

The above-mentioned product is a mixture of cementitious binders and mineral wool together with a dust suppressant.
According to article 2 (7)(b) and Annex V paragraph 7 and 10 of the Reach regulations, this material is exempted from Reach Registration.

1.2 - Use of Product

The product covers areas of mainly high temperature thermal insulation and surface protection.
(Please refer to specific technical data sheet for more information).

1.3 - Identification of Company

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2. Hazard Identification

Cement is a major constituent and the dust is alkaline and irritant. The other major constituent is rockwool fibre, for which the allowable limit is 2 fibers/ml or 5 mgs/m³.

- Signal word : irritant

- Hazard pictogram : X

3. Composition / Information On Ingredients

Cement Cas No. 65997-15-1 Xi
Mineral wool Cas No. 287922-11-6 Xi (Reach Registration No. 650-016-00-2)
Additives ----------

4. First-Aid measures

4.1.- General notes

If symptoms persist, consult a doctor.

4.2.- Eyes
Contact with dust can cause irritation.
Wash eyes with copious amounts of water. If irritation persists seek medical advice.

4.3.-Skin
Prolonged contact may cause drying and transient irritation.
Wash with soap and water.

4.4.- Inhalation
High exposure levels may cause coughing and mild respiratory tract irritation.
Move to fresh air. If irritation persists seek medical advice.

4.5.- Ingestion
No known health effects. Drink plenty of water and seek medical advice.

5. Fire-fighting measures

Non-combustible products,
Packaging and surrounding materials may be combustible
Use extinguishing agent suitable for surrounding combustible materials.

6. Accidental Release Measures

6.1 – Personal Precautions
Ensure ventilation, in case of insufficient ventilation, wear suitable respiratory equipment.

6.2 – Environmental Precausions
Prevent spillage or leakage

6.3 – Methods and Materials for Containment and Clean Up
Wet dust with water before sweeping or use a vacuum to collect dust.

7. Handling and storage

7.1 – Precausions for Safe Handling
The material will be damaged by moisture

7.2 – Conditions for Safe Storage
Store on pallets in a dry area

7.3 – Specific End Use
Please refer to LizMontagens S.A.

8. Risk Management Measures / Exposures Controls / Personal Protection

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility. If no regulatory dust or other

standards apply, a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection. Examples of exposure limits for respirable dust (in January 2002) are given below:

COUNTRY	EXPOSURE LIMIT*				SOURCE
	Respirable dust	Crystalline silica	Quartz	Cristobalite	
Germany	3 mg/m3 or 6 mg/m3		0.15 mg/m3	0.15 mg/m3	TRGS 900
France	5 mg/m3		0.10 mg/m3	0.05 mg/m3	Décret 97-331 du 10 avril 1997
U.K.	4 mg/m3	0.30 mg/m3			HSE - EH40

** Gravimetric concentrations of respirable dust – 8-hour time weighted average.*

EXPOSURE CONTROLS & PERSONAL PROTECTION
Protect eyes from dust. Use gloves and overalls as normal protection against dusty materials.
Use respiratory protection equipment as described in section 4.
In a dusty situation respiratory protection equipment should be used to provide a minimum nominal
protection factor (NPF) of 10 5BS 4275), and to meet the requirements of BS2091 for half mask dust respirator,
and BS6016 for disposable filtering mask respirators.

9. Physical and chemical properties

9.1.- Appearance
Grey/White coloured mixture of fibres and powder

9.2.- Odour
None

9.3.- pH
Up to 12 when slurried with water

9.4.- Melting point
Around 1500°C

10. Stability and Reactivity

10.1 - Reactivity
Does not occur

10.2 - Possibility of hazardous reactions
None

10.3 - Conditions to avoid
Storage in humidity, the material is highly alkaline when wet.

11. Toxicological information

11.1.- Acute toxicity
Substantial independent research has been conducted into the health effect of mineral wool and humans. There is no evidence that mineral wool presents any risk to production workers or end users today, or has done in the past 20 to 30 years. In the general environment levels of exposure are minute, and no hazard is posed to the public.

11.2.- Skin Corrosion/irritation
Substance may cause slight skin irritation : wear gloves

11.3.-Eyes
irritation possible :ear glasses

11.4.- Respiratory
Irritation possible : wear mask

11.5.- Others
The EU have classified most mineral wools as R38 – Irritant to skin only providing that the manufacturers can supply a toxicological report which sates that in a short-term bio persistence test by inhalation that fibres longer than 20µm have a weighted half life less than 10 days. The fibres used in this product comply with that standard.
In situations where mineral wool is being handled, steps should be taken to ensure that exposure to dust is kept at a minimum reasonable level, and not in excess of control limits.

12. Ecological information

12.1.- Toxicity
the addition of excess materials to watercourses should be avoided as the resulting high alkalinity could be hazardous to aquatic life.

12.2.- Degradability:
Product is not biodegradable

12.3.- Mobility
No information available

12.4.- Others:
No information available

13. Disposal Considerations

13.1.- Waste treatment methods :
Surplus material and empty bags should be disposed of as builder's waste.

14. Transport information

No special requirements.

15. Regulatory information

Safety, health and environmental regulations in accordance with EU regulations.

15.1.- Hazard pictogram :
X i (irritant)

15.2.- Risk Phrases :
R38 irritation to skin
R43 may cause sensitisation by skin contact

15.3.- Safety Phrases :
S24 avoid contact with eyes
S26 in case of contact with eyes, rinse immediately with plenty of water
S37/39 wear suitable gloves and eye/face protection.

16. Other Information

No.

Technical data sheets
For more information on individual products please see the relevant technical data sheet listed below:
Product Datasheet Code

Other Information
NOTICE:
The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However safe as provided by law, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from
anormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product (however, this shall not act to restrict the
vendor's potential liability for negligence or under statute).