

FTL141.1 H&S

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PRODUCT IDENTIFICATION: FTL141.1

APPLICATION: INDUSTRIAL BRAKES AND CLUTCHES

1.- SPECIFICATIONS

Manufacturer:	Friction Technology LTD
Address:	Friction Technology Ltd Unit 11, (Zone 5), Cibyn. Industrial Estate. Caernarfon. Gwynedd. LL55 WALES
Telephone:	+44(0) 1286 875 197

2.- HAZARDS IDENTIFICATION

CLASSIFICATION AND IDENTIFICATION OF HAZARDS	
Hazards for the humans:	Exposure to dust created by handling of this product should be kept as low as reasonably practicable limits. Handling of product may cause skin irritation. No health risks have so far been known in cases where this product has been handled and processed properly. The mineral fibres have been classified by the EU as Carc.Cat.3 (substances which cause concern for man owing to possible carcinogenic effect) and as an irritant to skin. High dust levels may irritate the throat and eyes.
Hazards for the environment:	NK

3.- COMPOSITION INFORMATION

Name	CAS N°	Concentration	OEL	Exposure Limit	Risk Phrases
Mineral Fibres:	65997-17-3	<45%	2fibre/ml 5mg/m ³ dust	8 hour TWA	R38, R40
Graphite:	7782-42-5	<5%	10mg/m ³	8 hour TWA	
Para-aramid fibre:	1344-28-1	<12%	15mg/m ³	8 hour TWA	

4.- EMERGENCY AND FIRST AID PROCEDURES

Inhalation:	Avoid breathing dust, if happens move to fresh air. Get medical attention in case of persistent cough
Ingestion:	If dust is swallowed, rinse mouth with water and obtain medical advice
Skin contact:	Wash with soap and water for 15 minutes. Obtain medical advice if irritation
Eye contact:	Irrigate with large amounts of water for at least 15 minutes. Obtain medical advice if irritation does not disappear

5.- FIRE HAZARD DATA

Extinguisher:	Any standard extinguishing equipment may be used
Exposure hazards:	Heated to very high temperatures, may give off toxic smokes.
Protective equipment:	Wear self-contained breathing equipment

6.- ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid breathing and inhalation of dust. Use PPE as identified in Section 8
Cleaning measures:	Dust has to be collected by cleaned with a wet cloth or vacuum
Environmental Precautions:	No special precaution required

7.- HANDLING AND STORAGE

Precautions for safe handling:	Provide appropriate exhaust ventilation at places where dust is formed.
Storage:	Keep the material stored in a clean and dry location avoiding temperatures above 100°C

8.- EXPOSURE CONTROLS/ PERSONAL PROTECTION

Information about design of technical facilities:	Ensure ventilation to maintain airborne dust levels to below established exposure standard. Use vacuum to remove dust instead of compressed air
Respiratory Protection:	Wear respiratory equipment if exposure limits are exceeded
Skin protection:	Handle with gloves and wear suitable protective clothing, e.g. general overalls
Eye protection:	Use appropriate goggles when machining or abrading products

9.- PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Grey/Black solid
Odour:	Characteristic friction material odour
Flammability:	Will burn at elevated temperatures and when finely divided
Auto Flammability:	>350°C
Melting Point:	NA
Water Solubility:	NA
Explosive Properties:	Non-hazardous as supplied but dust from grinding can presents an explosion hazard.
Relative Density	1.8 g/cm ³

10.- STABILITY AND REACTIVITY

Stability:	Stable
Hazardous decomposition products:	CO, CO ₂ , SO _x , NO _x , phenol, formaldehyde, butadiene and cyanides
Incompatibility with materials:	NA
Conditions to avoid:	Prolonged exposure to elevated temperatures, >300°C
Hazardous Reactions:	None, relatively inert.

11.- TOXICOLOGICAL INFORMATION

Inhalation:	May cause irritation to upper respiratory tract. The glass fibre present in this product is not classified as respirable (fibres with diameters <3.0µm that are capable of entering the respiratory system). Assessment of toxicity of man-made mineral fibres has identified the fact that fibres which cannot enter the respiratory system will not be a factor for the induction of respiratory diseases.
Eye contact:	May cause irritation
Skin contact:	May cause irritation
Ingestion:	NK
Carcinogenicity:	The International Agency for Research on Cancer designated glass fibre a Group 3 "not classifiable as to human carcinogenicity". Rockwool fibres are classified by the EU as Carc.Cat.3 (substances which cause concern for man owing to possible carcinogenic effect). See below: Mineral Fibres 11.1 Coarse fibres Coarse fibres can cause itching of the skin, foreign body reaction in the upper respiratory system (mucous membranes) and in the eyes. The itching and possible inflammation are a mechanical reaction to the coarse fibres (of more than about 5µm in diameter) and are not damaging in the way chemical irritants may be. They generally abate within a short time after the end of the



exposure. When products are handled continually, the skin itching generally diminishes.

11.2 Respirable fibres

Animal studies

Lifetime inhalation studies of rats exposed to high levels of stone wool fibres have not shown any excess of lung tumours. However, they did produce evidence of fibrosis (scar tissue) at the higher exposure levels. The fibrosis occurred late and was at a low level. Studies using non-physiological routes of administration (implantation or injection) and high doses of fibres have shown an excess of tumours.

Experiences in humans (Epidemiological Studies)

Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. The studies have found no significant evidence of non-malignant lung disease (e.g. fibrosis). The studies have not established a casual relationship between exposure to stone wool and malignant diseases (lung cancer or mesothelioma).

In the latest follow-up in Europe, there was some excess of lung cancer. However, much of the excess was observed in one production plant, where workers had been exposed to asbestos and polycyclic hydrocarbons. For the remaining plants, there was little evidence of an association of stone wool production and any excess of lung cancer. To establish reasons for the unexplained excess, a case-control study is being conducted.

12.- ECOLOGICAL INFORMATION

Eco Toxicity:	Not established
Mobility:	Not established
Biodegradation:	Not inherently biodegradable
Bio Accumulation:	Not established

13.- DISPOSAL CONSIDERATIONS

General:	Seal all dust created by abrading in impervious bags and dispose to a suitable licensed landfill site
Disposal Methods:	Remove all packaging for recovery or incinerate/landfill

14.- TRANSPORT INFORMATION

Transport:	Not classified as dangerous for conveyance. Use any container of suitable size and length
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15.- REGULATORY INFORMATION

EEC Classification:	Not classified.
Danger symbol:	Xn, Harmful
Risk Phases:	Irritating to skin (R38) Possible risks of irreversible effects (R40)
Safety Phrases:	Wear suitable protective clothing and gloves (S36/37)
Refer to:	Health & Safety at Work Act 1974 Control of Substances hazardous to Health (COSHH) Regulations 1994
Please note:	This Safety Data Sheet does not constitute the user's own assessment of workplace risk as required by other health and safety legislation.

16.- OTHER INFORMATION

Issued By:	Friction Technology LTD
Issue Date:	17/11/2017
Further Information:	Health and Safety Executive Guidance Notes EH40/2000 - Occupational Exposure Limits 2000 EH46 - Man-Made Mineral Fibres MDHS14 - General Methods for the Gravimetric Determination of Respirable and Total Inhalable Dust. MDHS59 - Man-Made Mineral Fibre
Note:	This information is based on our present knowledge and is accurate at the date of issue, to the best knowledge of Friction Technology Ltd. However, it shall not constitute a guarantee for any specific product featured and shall not establish a legally contractual relationship and condition or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.