MATERIAL SAFETY DATA SHEET

Product identification

Fibreboard

Synonyms — Hard fibreboard (hardboard)

Trade name — **Lion-Standard**

Description — This wood based panel product has been manufactured from fibres made of wood saw dust and veneer chips. The primary bond usually deriving from felting of the fibres and their inherent adhesive properties.In addition small amounts of phenolic resin is used to increase adhesion between fibres.

Potential airborne releases

This product may release minute quantities of formaldehyde in gaseous form by below 0.1 ppm concentration. Manual or mechanical cutting or abrasion processes performed on the product can result in generation of dust from fibreboard.

PHYSICAL DATA

Boiling point	Not applicable
Specific gravity (H_2O = 1)	0,95 - 1
Vapor density	Not applicable
% volatiles by volume	0
Melting point	Not applicable
Vapor pressure	Not applicable
Solubility in H_2O (% by weight)	< 0.1 %
Evaporation rate (butyl acetate = 1)	Not applicable
pH	Not applicable
Appearance	light brown colour , top side smooth back side mesh screen pattern

FIRE AND EXPLOSION DATA

Flash point — Not applicable

Autoignition temperature

Not available (will depend upon duration of exposure to heat source and other variables).

Explosive limits in air — See below under “Unusual fire and explosion hazards”.

Extinguishing media	Water, carbon-dioxide, sand
Special fire fighting procedures	None

Unusual fire on explosion hazards

Sawing, sanding or machining can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the LEL for wood dust.

REACTIVITY DATA

Conditions contributing to instability	Stable under normal conditions
Incompatibility	Avoid contact with oxidizing agents. Avoid open flame. Product may ignite in excess of 182 degrees C.
Hazardous decomposition products	Thermal and/or thermal oxidative decomposition can produce irritating and toxic fumes and gases, including carbon monoxide, aldehydes, organic acids and polynuclear aromatic compounds.
Hazardous polymerization	Not applicable

HEALT EFFECTS INFORMATION

Exposure limits:

Formaldehyde	OSHA PEL-TWA 0,75 ppm OSHA PEL-STEL 2 ppm ACGIH TLV-CEILING 0.3 ppm
Wood dust	OSHA PEL TWA 5 mg/m^3 OSHA PEL - STEL 10 mg/m^3
Formaldehyde emission	Allowed value 0.1 ppm Measured value with this product 0.02 ppm (according to standard EN 717-1).
Eye contact	Wood dust can cause irritation and inflammation.
Skin contact	Various species of wood dust may evoke allergic contact dermatitis in sensitized individuals.

Burning	According to the ISO/DIS 5660 tests the toxicity index of fire effluents was small, but there are many compounds in smoke gases which can cause irritation to eyes, nose and throat.
Ingestion	Not likely to occur.
Inhalation:	
Wood dust	May cause nasal dryness, irritation and obstructiuon. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.
prolonged,	Wood dust, depending on species*), may cause dermatitis or repetitive contact; may cause respiratory sensitization and/or irritation. IARC classifies wood dust as carcinogen ti humans (Group 1). This classification is based primarily in IARC`s evaluation of increased risk in the occurrance of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate cancer of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or recturn with exposure to wood dust.
	*) The risk of nasal cancer was the subject of a joint Nordic study. No case caused by a Finnish tree species (birch, spruce) was found in Finland. Hernberg & al. Nasal cancer and occupational exposures. *Scand j work environ health* 9 (1983) 208-213.

PRECAUTIONS, SAFE HANDLING

In higher temperatures (>130 °C) there may build-up noxious gases. Then provide adequate ventilation.

Wood dust: Avoid dusty conditions and provide good ventilation.

GENERALY APPLICABLE CONTROL MEASURES

Ventilation: Provide adequate general and local exhaust ventilation to keep airborne contaminant concentration levels below the OSHA PELs.

Personal protective equipment: Wear goggles or safety glasses when manufacturing or machining the product. Wear NIOSH/MSHA approved respirator when the allowable exposure limits may be exceeded. Other protective equipment such as gloves and outer garments may be needed depending on dust conditons.

EMERGENCY AND FIRST AID PROCEDURES

Eyes	Flush eyes with large amounts of water. Remove to fresh air. If irritation persists, get medical attention.
Skin	Wash affected areas with soap and water. Get medical advice if rash or persistent irritation or dermatitis occurs.
Inhalation	Remove to fresh air. Get medical advise if persistent irritation servere coughing or breathing difficulty occures.
Ingestion	Not applicable
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