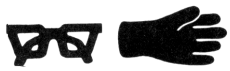
SOPREMA
We've got you covered

SAFETY DATA SHEET

COMPOSITE BOARDS

Offerte en français

GHS	PROTECTIVE CLOTHING	TRANSPORT INFORMATION
Not regulated		**Not regulated**

SECTION I: IDENTIFICATION

Trade names: **Xpress Board HD, Xpress Board HD Sanded, Xpress Vap'R Board, Xpress ISO, Xpress EPS, Sopra-ISO**

Use: Underlayment for roofing.

Distributor:
Soprema Australia Pty Ltd
Level 35, 100 Barangaroo Avenue
Sydney, NSW 2000
AUSTRALIA
Tel.: +61 8046 7464

In case of emergency:

Poison Information Centre: 13 11 26

SECTION II: HAZARD(S) IDENTIFICATION

PRODUCT NOT CONSIDERED A HAZARDOUS CHEMICAL, according to the Model WHS Regulations. PRODUCT NOT CONSIDERED A DANGEROUS GOOD, according to the ADG Code.

EMERGENCY OVERVIEW. SBS modified bitumen membrane laminated on a mineral wool board and/or a polystyrene board and/or a polyisocyanurate board. Under normal use, this product is not expected to create any health or environmental hazard. Inhalation of dust or of asphalt fumes can cause a respiratory irritation or congestion. Fume may be produced during combustion. Caution, this product may contain ingredients known as carcinogen by the State of California.

SECTION III: COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
SBS Modified Bitumen Membrane (Sanded or Plastic Film)				
Asphalt	8052-42-4	60-100	0.5 mg/m³	Not established
Oxidized asphalt	64742-93-4	10-30	0.5 mg/m³	Not established
Top surface				
Plastic Film or	Not available	< 1	Not established	Not established
Sand	Not available	10-30	0.1 mg/m³	Not established
Contains: **Crystalline Silica**[1]	14808-60-7	< 1	0.025 mg/m³	Not established
Reinforcement				
Fibreglass or (contains: fibreglass)	65997-17-3	1-5	1 f/cc (for fibres longer than 5 µm with a diameter of less than 3 µm)	Not established
Non-woven polyester	Not available	5-10	Not established	Not established
Mineral Wool Board				
Fibreglass	65997-17-3	60-100	1 f/cc (for fibres longer than 5 µm with a diameter of less than 3 µm) (OSHA)	Not established
Cured Urea Extended Phenolic Formaldehyde Binder	25104-55-6	3-7	Not established	Not established
EPS Finish (Polystyrene Board)				
Polystyrene	9003-53-6	60-100	10 mg/m³ (inhalable particulates) or 3 mg/m³ (respirable particulates)	Not established
ISO Finish (Polyisocyanurate Board)				
Isocyanurate Homopolymer	Not available	60-100	Not established	Not established
Fibreglass	65997-17-3	0.5-1.5	1 f/cc (for fibres longer than 5 µm with a diameter of less than 3 µm) (OSHA)	Not established

1. A proportion of crystalline silica can be present in the sand sprinkled on the top of some membranes. The crystalline silica contained in the sand is not likely to be found in the ambient air in concentration above the limit of exposure since the sand adheres to the surface of the membrane.

Effects of Short-Term (Acute) Exposure

Existing medical conditions:
Pre-existing chronic eye, skin and respiratory conditions may temporarily worsen due to exposure to dusts and fibres. (1)

INHALATION
Asphalt: If the membrane is torch-applied, asphalt fumes can be inhaled. Asphalt fumes can be irritating for the nose, the throat and the respiratory tract. Inhalation of high concentrations of asphalt fumes can cause a central nervous system (CNS) depression causing headaches, dizziness, nausea and unconsciousness. (1)

Fibreglass: Temporary mechanical irritation of the upper respiratory tract (scratchy throat, coughing, and congestion) may result from exposures to dusts and fibres in excess of applicable exposure limits. (1)

Polystyrene: Heating of polystyrene and additives used for its manufacturing may cause a thermal decomposition of the product with the release of potentially harmful substances such as styrene, benzaldehyde, 1-phenylethanol, phenol, toluene and benzene. (2)

Isocyanurate homopolymer: Dust of isocyanurate homopolymer may cause a mechanical irritation of the upper respiratory tract. (1)

EYE CONTACT
Asphalt: If the membrane is torch-applied, contact with hot product may cause burns. (1)

Fibreglass: Dusts and fibres may cause temporary mechanical irritation (itching) or redness to the eyes. (1)

Isocyanurate homopolymer: Dust of isocyanurate homopolymer may cause a mechanical irritation, redness and tearing. (1)

SKIN CONTACT
This product may cause skin irritation because of its rough surface.

Asphalt: If the membrane is torch-applied, the contact with hot product can cause burns. (1)

Fibreglass: Dusts and fibres may cause temporary mechanical irritation (itching) or redness to the skin. (1)

Isocyanurate homopolymer: Skin contact with pieces of board may cause a mechanical abrasion or cuts. (1)

INGESTION
It is unlikely under normal conditions of use. (1)

Effects of Long-Term (Chronic) Exposure

INHALATION
Asphalt: If the membrane is torch-applied, asphalt fumes can be inhaled. Long-term exposure to asphalt fumes may cause a change with skin pigmentation which can be worsened by the exposure to the sun. No information about the chronic effects of exposure to asphalt fumes on the lungs. (1)

Fibreglass: Temporary mechanical irritation of the upper respiratory tract (scratchy throat, coughing, and congestion) may result from exposures to dusts and fibres in excess of applicable exposure limits. (1)

Isocyanurate homopolymer: There is no evidence of long-term effects caused by isocyanurate homopolymer dust. (1)

SKIN CONTACT
Fibreglass: Repeated or prolonged contact with dust and fibres may cause temporary mechanical irritation (itching) or redness to the skin. (1)

CARCINOGENICITY
Asphalt: The International Agency for Research on Cancer (IARC) has concluded that this chemical is not classifiable as to it s carcinogenicity to humans. Asphalt fumes contain substances as benzo (a) pyrene and dibenz (a,h) anthracene known as carcinogen to humans (IARC). (1)

Oxidized asphalt: In its 2013 monograph (Volume 103), IARC conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was "occupational exposures to oxidized bitumens and their emissions during roofing" are classified in IARC Group 2A, "probably carcinogenic to humans". However, due to the product form, exposure to such component is unlikely under normal conditions of use.

Fibreglass: In October 2001, IARC completed a re-evaluation of breathable mineral wool fibres and classified them in Group 3 (not classifiable as to their carcinogenicity to humans). The possible carcinogenic effects of exposure to mineral wool fibres have been evaluated in a number of epidemiological (human) studies. Published reports of the early results of these studies identified significantly elevated rates of respiratory cancer in several subcohorts of the worker populations under evaluation (e.g., Simonato et al. 1987; Enterline et al. 1987). However, these studies had several methodological limitations, including failure to control for confounding exposures to other possible causes of the elevated cancer risk, including tobacco use and occupational exposures to recognized carcinogens such as asbestos. For these reasons, the authors of these reports did not interpret the results as establishing an association between exposure to mineral wool fibres and an increased risk of cancer. Several of these earlier reports formed part of the basis for IARC's previous classification of mineral wool fibres in Group 2B (possibly carcinogenic to humans) (IARC, 1987). (1)

Polystyrene: IARC concluded that this substance is not classifiable as to its carcinogenicity on human (Group 3). Styrene that can emanate from the thermal decomposition of the product is known by IARC as a possible carcinogen for human (Group 2B). (2)

Crystalline silica: Breathable crystalline silica of sand is not expected to be released, the sand is adhered to the product. According to IARC, crystalline silica is a carcinogen to human at the time of inhalation (Group 1). (2)

NERVOUS SYSTEM EFFECTS
No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY
No information available.

REPRODUCTIVE TOXICITY
No information available.

MUTAGENICITY
No information available.

TOXICOLOGICALLY SYNERGISTIC MATERIALS
No information available.

POTENTION FOR ACCUMULATION
No information available.

SECTION IV: FIRST-AID MEASURES

SKIN CONTACT
If irritation occurs, do not rub or scratch. Wash gently with warm water and soap to remove dust. Use a washcloth to help remove fibres. If irritation persists, consult a physician. In case of contact with hot product, flush skin immediately with large volumes of cold water. Do not attempt to remove material from affected area without medical assistance. Obtain medical attention.

EYE CONTACT
Flush eyes with water for at least 15 minutes while holding eyelids open. Do not rub the eyes. If irritation persists, consult a physician. In case of contact with hot product, do not attempt to remove material from affected area without medical assistance. Obtain medical attention.

INHALATION
If irritation occurs, remove the affected person to fresh air. Drink water, and blow nose, to clear dusts and fibres from throat and nose. If irritation persists, consult a physician. Give oxygen if necessary. Obtain medical attention.

INGESTION
Ingestion of this product is unlikely and not intended under normal conditions of use. If it does occur, rinse mouth with plenty of water to help remove dust and fibres, and drink plenty of water to help reduce potential gastrointestinal irritation. Do not induce vomiting unless directed to do so by a physician.

SECTION V: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not applicable
EXPLOSION DATA: Not applicable
FLASH POINT: Not applicable
AUTO-IGNITION TEMPERATURE: Not available
FLAMMABILITY LIMITS IN AIR: (% in volume) Not applicable

FIRE AND EXPLOSION HAZARDS
The mineral wool boards are non-combustible and do not pose a fire hazard. Asphalt fumes are flammable. The torch, of which the use is reserved to the welding of waterproofing membranes, can produce temperatures over 1 100°C (2 000°F).

COMBUSTION PRODUCTS
For the membrane: Carbon monoxide, carbon dioxide and incomplete combustion products. Burning of this material will produce thick black smoke. Irritating and/or toxic fumes and gases including hydrogen sulphide and sulphur dioxide may be generated by thermal decomposition or combustion. (1)

For the mineral wool board: Primary combustion products, when heated above 390°F (200°C), are carbon monoxide, carbon dioxide, ammonia, water and trace amounts of formaldehyde. Other undetermined compounds could be released in trace quantities. Emission usually only occurs during the first heating. The released gases may be irritating to the eyes, nose and throat. During initial heat-up, use appropriate respirators (air supplied) particularly in tightly confined or poorly ventilated areas. (1)

For the polystyrene board: The main products of the combustion of polystyrene are carbon monoxide and carbon dioxide. Products of incomplete combustion can be polycyclic aromatic hydrocarbons and styrene. (2)

For the polyisocyanurate board: The main products of the combustion are carbon monoxide, carbon dioxide, pentane and other hydrocarbons. (1)

FIRE FIGHTING INSTRUCTIONS
Evacuate area. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standards. Approach fire from upwind and fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Always stay away from containers because of the high risk of explosion. Stop leak before attempting to put out the fire. If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out. Move containers from fire area if this can be done without risk. Cool containers with flooding quantities of water until well after fire is out.

EXTINGUISHING MEDIA
Foam, carbon dioxide, sand, dry chemical.

SECTION VI: ACCIDENTAL RELEASE MEASURES

RELEASE OR SPILL
If dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator. Pick up large pieces and scoop up dusts and fibres after they have settled out of air. Avoid generating airborne dusts and fibres during cleanup. Do not use compressed air. Vacuum dusts and fibres. Place material in an appropriate container for disposal as non-hazardous waste. If dry methods or compressed air are used to collect dusts and fibres, all personnel in the area should wear OSHA-approved protective equipment.

If hot material is spilled, allow enough time to cool completely and remove to a container for disposal. This material is considered as non-hazardous waste Wash spill area with soap and water. Prevent entry into waterways, sewers, basements or confined areas.

SECTION VII: HANDLING AND STORAGE

HANDLING
Avoid generating airborne dusts and fibres. Unpack material at application site to avoid unnecessary handling of product. Keep work areas clean. Avoid unnecessary handling of scrap material and debris by placing such materials in suitable containers, which should be kept as close to the work area as possible. Ensure good ventilation. Local exhaust ventilation may be required if the method of use produces dust levels which exceed applicable exposure limits. Avoid excessive eye and skin contact with dusts and fibres.

Avoid prolonged exposure to mist, fumes or vapours from hot material. Minimise skin and eye contact. Use under adequate ventilation measures. Wash body parts after handling.

STORAGE
Store in areas/building designed to comply with appropriate dangerous goods regulations and Australian Standards. Keep material in original packaging until it is to be used. Store material to protect against adverse conditions including precipitation, sources of heat and ignition. Keep away from children. Avoid the accumulation of dust.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

HANDS: Wear resistant gloves in accordance with AS 2161.10.1 and AS 2161.1.
RESPIRATORY: If the TLV to dust is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with AS 1716& 1715.
EYES: Wear safety goggles or safety glasses with side shields in accordance with AS 1336.
FEET: Work shoes in accordance with standards.
BODY: Wear loose fitting, long-sleeved and long-legged clothing to prevent irritation. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles. Remove fibres from the work clothes, before leaving work to reduce potential skin irritation. Do not use compressed air for cleaning. If working in a very dusty environment it is advisable to shower and change clothes.
OTHERS: Eye bath and safety shower.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Semi-rigid or rigid, fibrous board covered with a black membrane
ODOUR AND APPEARANCE: Slight resin and asphalt odour
ODOUR THRESHOLD: Not applicable
VAPOUR PRESSURE (20°C): Not applicable
EVAPORATION RATE (Butyl acetate = 1): Not applicable
BOILING POINT (760 mm Hg): Not determined
FREEZING POINT: Not applicable
SPECIFIC GRAVITY (H_2O = 1): Variable
SOLUBILITY IN WATER (20°C): Nil
VOLATILE ORGANIC COMPOUND CONTENT (V.O.C.): Not applicable
VISCOSITY: Not applicable

SECTION X: STABILITY AND REACTIVITY

STABILITY: This material is stable.
CONDITIONS OF REACTIVITY: Avoid excessive heat.
INCOMPATIBILITY: Mineral wool board reacts with hydrofluoric acid. Polystyrene board reacts with hydrocarbons, esters, aldehydes and amines. Polyisocyanurate board reacts among others, with acetone, MEK, tetrahydrofuran, chlorine, chloroform and hydrogen peroxide.
HAZARDOUS DECOMPOSITION PRODUCTS: None identified.
HAZARDOUS POLYMERISATION: None

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA
Asphalt: Not available
Fibreglass: Not available
Crystalline silica: Not available

Effects of Short-Term Exposure (Acute)

Fibreglass: Several studies of intraperitoneal injection of high doses of mineral wool fibres have produced significant increases in the

incidence of mesothelioma (IARC, 2002). The intraperitoneal injection studies formed part of the basis for IARC's previous (IARC, 1987) Group 2B classification for mineral wool fibres. Leading scientists agree that intraperitoneal injection studies (i.e., surgical implantation or injection into the chest or abdomen) are the least relevant type of animal study for evaluating potential human risk for fibre exposures, because such studies bypass the animals' natural defense mechanisms and involve a type and pattern of exposure (implantation of a high dose early in life) that does not mimic human patterns of exposure (inhalation of much lower doses over a lifetime) (National Research Council, 2000). (1)

CARCINOGENICITY

Fibreglass: A well-designed long-term inhalation study in rats exposed to mineral wool fibres found no significant increase in lung tumour incidence, and no mesotheliomas (IARC, 2002). Likewise, in two intratracheal instillation studies of mineral wool fibres, no significant increase in the incidence of lung tumours or mesotheliomas was found (IARC, 2002). Inhalation studies are regarded as the most relevant type of animal data for evaluating potential human risk, and intratracheal instillation studies, while less relevant, are considered valuable for the initial screening of fibrous compounds (National Research Council, 2000). Thus, evaluating all the available animal studies in conjunction with the human data, IARC's most recent review finds "inadequate evidence overall for any cancer risk" from mineral wool fibres (IARC, 2001). According to ACGIH, the mineral fibres are confirmed animal carcinogen and unknown relevance for any risk of cancer. (1)

Crystalline silica: Several studies showed an increased incidence of lung tumours to rats exposed to quartz by inhalation during up to 2 years. IARC determined there was sufficient evidence that the quartz is carcinogen to experimental animals. (2)

TARGET ORGANS

No information available.

REPRODUCTIVE EFFECTS

No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

No information available.

MUTAGENICITY

No information available.

SECTION XII: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial and federal regulations may require that environmental and / or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.

SECTION XIII: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Consult local, state, provincial or territory authorities to know disposal methods.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated under the ADG Code, IMDG Code and IATA Code.

SECTION XV: REGULATORY INFORMATION

AICS: All the ingredients of this product are on the Australian Inventory of Chemical Substances.

SECTION XVI: OTHER INFORMATION

GLOSSARY

ACGIH:	American Conference of Governmental Industrial Hygienists
ADG:	Australian Dangerous Goods
AICS:	All the ingredients of this product are on the Australian Inventory of Chemical Substances.
CAS:	Chemical Abstract Services
GHS	Globally Harmonized System
IARC:	International Agency for Research on Cancer
LD_{50}/LC_{50}:	Less high lethal dose and lethal concentration published
NIOSH:	National Institute for Occupational Safety and Health
TLV-TWA:	Threshold Limit Value – Time-Weighted Average
WHS:	Work Health and Safety (Australia)

References:

(1) Safety Data Sheet of the supplier.
(2) CHEMINFO (2015) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada.

Code of SDS: **CA U DRU SS FS 074**
For more information: +61 2 8051 3153

Justification of the update:

- Australian version

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