



SDS 893 & 894

SAFETY DATA SHEET (NZ Supplement Sheet)

Product: Soprarock

NZ Supplier: Equus Industries Ltd
Sheffield Street Riverlands Estate
Blenheim, Marlborough 7274
Ph: 03 5780214
Email: admin@equus.nz

Emergency Phone Number: National Poison Center 0800POISON (0800 764 766)

Hazardous Status:

Classified as hazardous according to the criteria in The Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

HSNO Group and Approval Number:

Construction Products (Subsidiary Hazard) Group Standard 2020 HSR002544

Transport:

Regulated for Transport:	Refer to Section 14 of attached SDS
Hazchem:	Not Applicable
Marine Pollutant:	No

NB. This Supplement Sheet must be read in conjunction with the attached

SDS – Chemwatch 5494 - 62 Issued Date: 30/09/2021
Version No' 2.1.20.12

Soprarock

Soprema Australia Pty Ltd

Chemwatch: 5494-62
Version No: 2.1.20.12

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 30/09/2021
Print Date: 30/09/2021
L.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Soprarock
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Commercial, industrial and residential insulation. Use according to manufacturer's directions.
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Details of the supplier of the safety data sheet

Registered company name	Soprema Australia Pty Ltd
Address	L 35/100 Barangaroo Avenue, Sydney NSW 2000
Telephone	+61 3 9221 6230
Fax	Not Available
Website	www.soprema.com.au
Email	info@soprema.com.au

Emergency telephone number


Association / Organisation	Soprema Australia Pty Ltd
Emergency telephone numbers	042 595 2526 (Cruz Utanga: Mon-Fri 7.30am to 4pm)
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

Poisons Schedule	Not Applicable
Classification [1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2B, Specific Target Organ Toxicity - Repeated Exposure Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)	
Signal word	Warning

Hazard statement(s)

H315	Causes skin irritation.
H320	Causes eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s) Prevention

P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves and protective clothing.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
65997-17-3	94-99	<u>glass fibres</u>
25104-55-6	1-6	<u>phenol/ formaldehyde/ urea resin</u>
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available	

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay.
Ingestion	<ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Mineral fibres are a mechanical irritant, and are not expected to produce any chronic health effects from acute exposures.

Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

Lung function should be monitored, periodically, in individuals chronically exposed to fibres in an occupational setting

SECTION 5 Firefighting measures

Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves in the event of a fire. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use fire fighting procedures suitable for surrounding area. ▶ DO NOT approach containers suspected to be hot. ▶ Cool fire exposed containers with water spray from a protected location. ▶ If safe to do so, remove containers from path of fire. ▶ Equipment should be thoroughly decontaminated after use.
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Fire/Explosion Hazard	<p>Mineral fibres exhibit low thermal conductivity, low heat storage, and thermal shock resistance. In fire situations they withstand high temperatures without burning. Thermal decomposition is associated with polymeric binders and facings which may be present in the article. The packaging, facings and resin may smoulder, decompose or burn. Depending upon the facing, decomposition may produce toxic fumes of carbon monoxide (CO), carbon dioxide (CO₂), phenols, formaldehyde and other toxic gases. Vinyl facing will release hydrogen chloride gas.</p> <p>carbon dioxide (CO₂) silicon dioxide (SiO₂) other pyrolysis products typical of burning organic material.</p>
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid all personal contact, including inhalation. ▶ Access to area should be restricted by the use of ropes or other similar barriers and appropriate signs be utilised. ▶ Employees not engaged in the clean up should not be allowed within 3 metres of the work unless wearing suitable personal protective equipment (PPE). ▶ Wear protective clothing, gloves, safety glasses and dust respirator. ▶ Wet with water to prevent dusting. ▶ Avoid generating dust/ fibres. ▶ Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion-proof machines designed to be grounded during storage and use). ▶ Dampen with water to prevent dusting before sweeping ▶ Wet mopping and wiping may be utilised in some instances. ▶ Place in sealed containers, to prevent dust/ fibre emissions, ready for disposal.
Major Spills	<ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment and dust respirator. ▶ Access to area should be restricted by the use of ropes or other similar barriers and appropriate signs be utilised. ▶ Personnel not engaged in the cleanup should not be allowed in the vicinity of the spillage unless wearing suitable personal protective equipment (PPE). ▶ Prevent spillage from entering drains, sewers or water courses. ▶ Recover product wherever possible. ▶ Avoid generating dust. Sweep / shovel up. ▶ If required, wet with water to prevent dusting. ▶ Put residues in labeled plastic bags or other containers for disposal. ▶ Wash area down with a large quantity of water and prevent runoff into drains. ▶ If contamination of drains or waterways occurs, advise emergency services. ▶ After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▶ The use of ceramic fibres in the work place should be reviewed in the context of frequency of use and potential for exposure. ▶ In circumstances where the respiratory standards or excursion limits are approached, work areas should be designated by the use of ropes or other similar barriers and appropriate signs be utilised, where possible. This is especially true for all overhead work involving ceramic fibres. ▶ Employees not engaged in the ceramic fibre work should not be allowed within 3 metres of the work unless wearing suitable personal protective equipment (PPE). ▶ An example of the appropriate signage for the restricted area is: CERAMIC FIBRE WORK AREA; FOLLOW SAFETY INSTRUCTIONS. <p>All installation and/ or removal practices should be designed to minimise the liberation of dusts or fibres.</p> <p>For Installation:</p> <ul style="list-style-type: none"> ▶ The ceramic fibre material should be kept in its storage container until installation is ready to proceed. ▶ Containers/ bags should only be opened within the designated work areas. ▶ Empty storage bags should be stored in waste containers along with waste material. <p>For Removal:</p> <ul style="list-style-type: none"> ▶ Waste material should be wetted to prevent generation of dusts and placed in sealed containers to prevent dust/ fibre emissions. <p>Upon completion of installation/ removal:</p> <ul style="list-style-type: none"> ▶ All excess material should be sealed in bags/ containers prior to removal from designated work area. ▶ Area should then be cleaned using an industrial vacuum cleaner. ▶ Any remaining contaminant material should be removed with minimum liberation of dusts/fibres. ▶ Wet mopping and wiping may be utilised in some instances when an industrial vacuum is not available. ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Avoid contact with moisture. ▶ Avoid contact with incompatible materials. ▶ When handling, DO NOT eat, drink or smoke. ▶ Keep containers securely sealed when not in use. ▶ Avoid physical damage to containers.
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Soprarock

	<ul style="list-style-type: none"> ▶ Always wash hands with soap and water after handling. ▶ Work clothes should be laundered separately. Launder contaminated clothing before re-use. ▶ Use good occupational work practice. ▶ Observe manufacturer's storage and handling recommendations contained within this SDS. ▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. ▶ DO NOT allow clothing wet with material to stay in contact with skin
Other information	<ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed. ▶ No smoking, naked lights or ignition sources. ▶ Store in a cool, dry, well-ventilated area. ▶ Store away from incompatible materials and foodstuff containers. ▶ Protect containers against physical damage and check regularly for leaks. ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Polyethylene or polypropylene container. ▶ Packing as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid reaction with oxidising agents, bases and strong reducing agents. ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
glass fibres	15 mg/m3	170 mg/m3	990 mg/m3

Ingredient	Original IDLH	Revised IDLH
glass fibres	Not Available	Not Available
phenol/ formaldehyde/ urea resin	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
glass fibres	E	≤ 0.01 mg/m ³

Notes: Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

MATERIAL DATA

Exposure controls

Appropriate engineering controls	<ul style="list-style-type: none"> ▶ Provide good ventilation (either forced or natural) ▶ Where possible, enclose sources of dust and provide dust extraction at the source. ▶ Restrict access to work areas involved in handling man-made mineral fibres and ensure that adequate training, in the handling of such materials, has been provided. ▶ Use operating procedures which limit the generation of dusts. ▶ When working with unbonded fibres, local exhaust ventilation is generally a requirement. ▶ Exhaust ventilation should be designed to prevent accumulation and recirculation of dusts and to remove dusts from the workplace. ▶ Keep the work place clean. Use a vacuum cleaner fitted with a HEPA filter; avoid using brooms and compressed air. ▶ Where possible use products specially tailored to the application; some products can be delivered, ready for use, without further cutting or machining. Some can be treated or packaged to minimise or avoid dust emission during handling. ▶ When removing embrittled materials, the removal area should be contained to minimise the transfer of dust to other work areas and should include an intermediate changing and cleaning area. Local exhaust ventilation should be provided. ▶ If measured respirable fibre is less than the recommended occupational exposure level, wear approved dust respirator Class P1 (half-face). ▶ Use a Class P2 or P3 respirator (full-face), where exposure is above the recommended occupational exposure level ▶ Use an approved respirator if power tools without dust extraction or containment are used.
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ Chemical goggles. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below

Hands/feet protection	<ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> <p>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:</p> <ul style="list-style-type: none"> · frequency and duration of contact, · chemical resistance of glove material, · glove thickness and · dexterity <p>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</p> <ul style="list-style-type: none"> · When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. · When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. · Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use. · Contaminated gloves should be replaced. <p>As defined in ASTM F-739-96 in any application, gloves are rated as:</p> <ul style="list-style-type: none"> · Excellent when breakthrough time > 480 min · Good when breakthrough time > 20 min · Fair when breakthrough time < 20 min · Poor when glove material degrades <p>For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.</p> <p>It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.</p> <p>Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.</p> <p>Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:</p> <ul style="list-style-type: none"> · Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of. · Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential <p>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▶ Disposable coveralls or long sleeve, loose fitting protective clothing, e.g. overalls (launder clothing separately from other clothing). ▶ When working above head height, use head covering. ▶ Minimise dust generation by using sharp hand cutting tools if possible. ▶ Powered tools (e.g. saws etc.) should only be used if fitted with dust extraction and containment equipment. ▶ Vacuum cleaners should be available for fibre/dust removal. ▶ Personnel involved in the installation of unbonded ceramic materials should wear disposable coveralls, or long-sleeve loose fitting clothing, gloves and suitable respirator. Such equipment should also be used by personnel employed in removing materials which have not become embrittled. ▶ Personnel involved in the removal of embrittled material should in addition, use a full-face cartridge respirator, or full-face powered air purifying respirator, each with suitable particulate filter, or a full-face pressure demand airline respirator.

Respiratory protection

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1	-
up to 50	1000	-	A-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	A-2
up to 100	10000	-	A-3
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used
- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

Class P2 particulate filters are used for protection against mechanically and thermally generated particulates or both.

P2 is a respiratory filter rating under various international standards, Filters at least 94% of airborne particles

Suitable for:

- Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.
- Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
- Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS

Use appropriate respiratory protective equipment against excessive concentrations of fibrous dusts.

Airborne Fibre Concentration	Full Face P2	Full Face P3
Above Exposure Limit Value	Recommended	-
For short-term operation where excursions above the limit value are less than factor of 10		Required

- Correct respirator fit is essential to obtain adequate protection.
- Even though the recommended level for respirable fibre is not exceeded in normal conditions, respiratory protection is advisable in dusty areas.
- In very dusty conditions and confined spaces greater comfort may be afforded by a full-face powered air-purifying respirator.
- Preforms (batts) designed for high temperature applications (above 177 degrees Celsius), may release gases (CO₂, formaldehyde, amines) irritating to the eyes, nose and throat during initial heat-up. In confined or poorly ventilated areas, use air supplied respirators during the first heat-up cycle.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Grey/ green fibrous batt or board with a slight resin odour; does not mix with water.		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	1177	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled	<p>Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.</p> <p>Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.</p> <p>Loose and granular forms produce more dust than preforms (batts) but handling of batts results in fibre dislodgement and dusting. Nose and throat irritation may be transitory. Material may be dampened with a dedusting oil to mitigate problems.</p>
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	<p>There is little evidence for acute toxicity after inhalation of mineral fibres. Rockwool/ glasswool administered by inhalation produce little fibrosis in experimental animals [IARC Monograph 43]</p> <p>Effects on lungs are significantly enhanced in the presence of respirable particles. Overexposure to respirable dust may produce wheezing, coughing and breathing difficulties leading to or symptomatic of impaired respiratory function.</p>
<p>Ingestion</p>	<p>The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.</p>
<p>Skin Contact</p>	<p>Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.</p> <p>The material may accentuate any pre-existing dermatitis condition</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>All man-made mineral fibres, in common with their natural counterparts, may produce mild irritation and inflammation which results in itching or, in the case of certain sensitive individuals, a slight reddening of the skin. This is due to entirely to a mechanical reaction to the sharp, broken fibre ends and does not involve chemical or allergic effects. Itching and possible inflammation are mechanical reactions to coarse fibres greater than 5 micron in diameter. These symptoms occur particularly in folds of skin around wrists, collars and waistbands. Perspiration aggravates the condition. Irritation is accentuated by fibre adhering to sweaty skin at elevated temperatures. Symptoms generally abate within a short time after exposure ceases. When products are handled continually, the skin itching often diminishes</p>
<p>Eye</p>	<p>Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.</p>
<p>Chronic</p>	<p>Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.</p> <p>Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.</p> <p>Serious damage (clear functional disturbance or morphological change which may have toxicological significance) is likely to be caused by repeated or prolonged exposure. As a rule the material produces, or contains a substance which produces severe lesions. Such damage may become apparent following direct application in subchronic (90 day) toxicity studies or following sub-acute (28 day) or chronic (two-year) toxicity tests.</p> <p>Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.</p> <p>Limited evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a significant number of individuals at a greater frequency than would be expected from the response of a normal population.</p> <p>Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking.</p> <p>Loose and granular forms produce more dust than preforms (batts) but handling of batts results in fibre dislodgement and dusting. Repeated exposure results in immune response (toughening of skin) so that irritation (rash) often subsides in 2-3 weeks. The irritation and response recurs if exposure is intermittent. If irritation persists, worker exposure must be terminated and medical opinion sought.</p> <p>There is little evidence for acute toxicity after inhalation of man-made mineral fibres (MMMMF). Chronic inhalation of respirable fibres lead to pulmonary fibrosis</p> <p>Rockwool contains a small proportion of respirable fibres. [CCINFO, ILO ENCYCLOPEDIA] Glasswool administered by inhalation produces little pulmonary fibrosis in experimental animals. No increase in the occurrence of mesothelioma has been observed in man-made mineral fibre / glass fibre production workers. [IARC Monograph 43]</p> <p>Inhaled synthetic mineral fibres (SMFs) generally exhibit some level of biopersistence, resisting changes in number, dimension, surface chemistry, chemical composition, surface area and other characteristics, depending on their composition. Alteration to any of these parameters, in turn, alters a fibre's residence in the lung, and as a result, the lung's long-term response to the fibre. Fibres, of sufficiently small length, may undergo macrophage-mediated clearance in the lung. For fibres that are too long to be dealt with by alveolar macrophages, principal alternate clearance mechanisms include translocation to other thoracic compartments, dissolution and/or transverse breakage into shorter segments. In vitro fibre dissolution experiments show a broad range of dissolution rate constants (K_{dis} = ng/cm²/hr) for the various synthetic vitreous (glass-like) fibres. For refractory ceramic fibres (RCF) the K_{dis} is 3 whilst for slag wool the K_{dis} is greater than 400. In vitro fibre-degradation studies demonstrate a direct relationship between the fibre's rate of leaching (some components dissolve more rapidly than others leaving a depleted silica matrix) and its tendency to undergo transverse fragmentation. Synthetic mineral fibres tend to break transversely in contrast to asbestos which tends to split longitudinally. This is significant for pathogenesis because over a long period of time in the lung, the actual numbers of long asbestos fibre in the lung can increase due to splitting along the long axis whilst the number of long SMFs decrease as a result of splitting along the short axis. Lung clearance by macrophages and the mucociliary escalator has been found, experimentally, to be more efficient for shorter segments.</p> <p>Fibres which exhibit a rapid rate of leaching and fragmentation in the lung are less biopersistent, even though they may not dissolve completely. Fiber toxicology tends to be dominated by physical characteristics such as shape and length whilst nonfibrous dusts exhibit a chemical origin of toxicity. Early rodent studies found no tumourigenesis as a result of inhalation exposure to several types of fibreglass other than transient lung inflammation that resolved after a brief recovery period. However, hamsters exposed to a special application glass of high durability (475 glass) developed minimal lung fibrosis; one animal out of 125 developed mesothelioma. This is the first published report of permanent lung damage in laboratory animals following inhalation of glass fibre compositions (albeit of a special type). Preliminary results from another study with another high durability glass (E glass) showed fibrosis and pulmonary tumours in rats exposed to high concentrations of inhaled microfibres. (E glass is now produced as a continuous filament that is too thick to be respirable and is no longer available as microfibres). Several studies have demonstrated that glass fibres, insulation glass in particular, clear the lung more rapidly than amosite asbestos. Early inhalation studies of the chronic toxicity of refractory ceramic fibre (RCF1) reported conflicting results. In more recent studies rodents were exposed to four types of RCF (RCF1-4) for 6 hours/day, 5 days/week, at a maximum dose of 30 mg/m³ (test fibres were selected to have dimensions close to 1 µm x 20 µm); in rats RCF1 induced lung fibrosis, lung tumours (13%) and pleural mesothelioma (1.6%). In hamsters RCF1 induced lung fibrosis, mesothelioma (38%) and no lung tumours. Species related differences also raise the issue of significance of these findings in humans. Early rodent inhalation studies reported no fibrosis or tumours with chronic exposure to mineral wool. More recent studies with two compositions of mineral wool, - rock wool (MMVF21) and slag wool (MMVF22), size selected to have average dimensions of 1 µm x 20 µm, showed that neither mineral wool was tumourigenic, in rats but that MMVF21 produced minimal lung fibrosis late in the inhalation period. Biopersistence, as represented by 90% clearance rate (T-90), has been shown, experimentally to agree well with toxicity; composition with long-fibre T-90s greater than 200 days were all fibrogenic and all but MMVF21 were associated with tumourigenesis. This relationship can be explained as follows; fibres too thick to be inhaled into the lower lung or short enough to be transported by alveolar macrophages, are quickly cleared from the respiratory tract and will probably produce no other response than transient pulmonary inflammation. Long fibres with diameters less than 3 µm are able to penetrate into</p>

the lower lung but will become innocuous if they dissolve rapidly, can break transversely into smaller segments that can be cleared by alveolar macrophages and ciliated epithelium. Long thin fibres that reach the lower lung in sufficient quantities will be pathogenic if they do not dissolve or fragment. Surface chemistry may also play a role; In recent rat inhalation studies, E glass fibres but not 475 glass fibres were pathogenic in rats although both appeared to clear from the rat lung at about the same time. However during a year of post-exposure recovery 475 glass fibres underwent significant changes in chemistry due to leaching.

Overexposure to respirable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity, chest infections

Repeated exposures, in an occupational setting, to high levels of fine- divided dusts may produce a condition known as pneumoconiosis which is the lodgement of any inhaled dusts in the lung irrespective of the effect. This is particularly true when a significant number of particles less than 0.5 microns (1/50,000 inch), are present. Lung shadows are seen in the X-ray. Symptoms of pneumoconiosis may include a progressive dry cough, shortness of breath on exertion (exertional dyspnea), increased chest expansion, weakness and weight loss. As the disease progresses the cough produces a stringy mucous, vital capacity decreases further and shortness of breath becomes more severe. Other signs or symptoms include altered breath sounds, diminished lung capacity, diminished oxygen uptake during exercise, emphysema and pneumothorax (air in lung cavity) as a rare complication.

Removing workers from possibility of further exposure to dust generally leads to halting the progress of the lung abnormalities. Where worker-exposure potential is high, periodic examinations with emphasis on lung dysfunctions should be undertaken

Dust inhalation over an extended number of years may produce pneumoconiosis. Pneumoconiosis is the accumulation of dusts in the lungs and the tissue reaction in its presence. It is further classified as being of noncollagenous or collagenous types. Noncollagenous pneumoconiosis, the benign form, is identified by minimal stromal reaction, consists mainly of reticulin fibres, an intact alveolar architecture and is potentially reversible.

- ▶ The use of ceramic fibres in the work place should be reviewed in the context of frequency of use and potential for exposure.
- ▶ In circumstances where the respiratory standards or excursion limits are approached, work areas should be designated by the use of ropes or other similar barriers and appropriate signs be utilised, where possible. This is especially true for all overhead work involving ceramic fibres.
- ▶ Employees not engaged in the ceramic fibre work should not be allowed within 3 metres of the work unless wearing suitable personal protective equipment (PPE).
- ▶ An example of the appropriate signage for the restricted area is:

CERAMIC FIBRE WORK AREA; FOLLOW SAFETY INSTRUCTIONS.

All installation and/ or removal practices should be designed to minimise the liberation of dusts or fibres.

For Installation:

- ▶ The ceramic fibre material should be kept in its storage container until installation is ready to proceed.
- ▶ Containers/ bags should only be opened within the designated work areas.
- ▶ Empty storage bags should be stored in waste containers along with waste material.

For Removal:

- ▶ Waste material should be wetted to prevent generation of dusts and placed in sealed containers to prevent dust/ fibre emissions.

Upon completion of installation/ removal:

- ▶ All excess material should be sealed in bags/ containers prior to removal from designated work area.
- ▶ Area should then be cleaned using an industrial vacuum cleaner.
- ▶ Any remaining contaminant material should be removed with minimum liberation of dusts/fibres.
- ▶ Wet mopping and wiping may be utilised in some instances when an industrial vacuum is not available.

Soprarock	TOXICITY	IRRITATION
	Not Available	Not Available
glass fibres	TOXICITY	IRRITATION
	Oral(Rat) LD50; >2000 mg/kg ^[1]	Not Available
phenol/ formaldehyde/ urea resin	TOXICITY	IRRITATION
	Oral(Rat) LD50; 7000 mg/kg ^[2]	Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

GLASS FIBRES

The dust has been associated with skin irritation due to the mechanical action of the fibres [CHEMINFO, Sax, ILO ENCYCLOPAEDIA]. MMMF are manufactured to definite fibre diameters and cannot split along their length rather they break across and form small particles not needles [FARIMA].

Borosilicate ingredients are insoluble, inert, and will not significantly penetrate the skin. The metal cations (such as lead, zinc, silver are secure in the molecules and will not be bioavailable. Therefore, there would not be any systemic toxicity expected from dermal application or contact.

These ingredients are not dermal irritants or sensitizers.

Borosilicate use in personal care products introduces the possibility of inhalation exposure. The particle size of borosilicate glasses was reported to range from 50 nm – 1000 um with the largest portion being in the 50 – 300 um range. The sizes of a substantial majority of the particles of these ingredients, as manufactured, are larger than the respirable range and/or aggregate and agglomerate to form much larger particles in formulation. These ingredients are reportedly used at concentrations up to 4% in cosmetic products that may be aerosolized and up to 97% in products that may become airborne. Around 95% – 99% of droplets/particles would not be respirable to any appreciable amount. Coupled with the small actual exposure in the breathing zone and the short exposure time, this information indicates that incidental inhalation would not be a significant route of exposure that might lead to local respiratory or systemic toxic effects.

Notably there is a lack of irritation or sensitization in tests of dermal exposure, no systemic toxicity at 5000 mg/kg, and the absence of genotoxicity in an Ames test for a supernatant of the related chemical calcium borosilicate. Borosilicate glasses are chemically inert and thus not systemically toxic.

The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans.

For fibre glass wool: In October 2001, IARC classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans." The 2001 decision was based on current human and animal research that shows no association between inhalation exposure to dust from fibre glass wool and the development of respiratory disease. This is a reversal of the IARC finding in 1987 of a Group 2B designation (possibly carcinogenic to humans) based on earlier studies in which animals were injected with large quantities of fiber glass. NTP and ACGIH have not yet reviewed the IARC reclassification or the most current fibre

glass health research; at this time, both agencies continue to classify glass wool based on the earlier animal injection studies.

There is little evidence for acute toxicity after inhalation of rockwool/ slagwool/ glasswool mineral fibres (MMMF). Rockwool/glasswool administered by inhalation produced little pulmonary fibrosis in experimental animals. [IARC Monograph 43]

Animal studies with amorphous silica show that surviving rats rapidly recovered on removal from dust, the silica was largely eliminated and cellular nodules, perivascular infiltrations and emphysema were almost completely resolved [Patty's].

The dust has been associated with skin irritation due to the mechanical action of the fibres [CHEMINFO, Sax, ILO ENCYCLOPEDIA].

MMMF are manufactured to definite diameters and cannot split along their length rather they break across and form small particles not needles

Soprarock

	[FARIMA]. Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
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PHENOL/ FORMALDEHYDE/ UREA RESIN	No significant acute toxicological data identified in literature search.
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Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✓
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Soprarock	Not Available	Not Available	Not Available	Not Available	Not Available
glass fibres	NOEC(ECx)	72h	Algae or other aquatic plants	>=1000mg/l	2
	EC50	72h	Algae or other aquatic plants	>1000mg/l	2
	LC50	96h	Fish	>1000mg/l	2
phenol/ formaldehyde/ urea resin	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	<i>Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data</i>				

Synthetic vitreous fibers are nonvolatile and generally insoluble, so their natural tendency is to settle out of air and water, and deposit in soil or sediment. Synthetic vitreous fibers are not known to undergo any significant transformation or degradation in air, sediment or soil, or water.

The silicate network of all synthetic vitreous fibers can be attacked by acids or alkaline solutions, but this does not occur to any significant extent under environmentally relevant conditions.

Using *in vitro* tests at 37 C with simulated extracellular fluid (pH 7.4), the dissolution rates of glass, rock, and slag wools with diameters of 1 um were reported as 0.4, 1.2, and 2.0 years, respectively. Lifetimes for refractory ceramic fibers were about 5 years. Because of their larger surface area, fine fibers will undergo dissolution more readily than coarse fibers

Binder-coated mineral wools are hydrophobic, therefore, no adverse environmental effects would be expected if this product was accidentally released in the water or soil. No harm to fish or wildlife would be caused by coated mineral wools.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ Containers may still present a chemical hazard/ danger when empty. ▶ Return to supplier for reuse/ recycling if possible. <p>Otherwise:</p> <ul style="list-style-type: none"> ▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product. <p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.</p> <p>A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> ▶ Reduction ▶ Reuse ▶ Recycling ▶ Disposal (if all else fails) <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</p> <ul style="list-style-type: none"> ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority. ▶ Recycle wherever possible. ▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. ▶ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material). ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
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SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
glass fibres	Not Available
phenol/ formaldehyde/ urea resin	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
glass fibres	Not Available
phenol/ formaldehyde/ urea resin	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

glass fibres is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)
Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

phenol/ formaldehyde/ urea resin is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (glass fibres; phenol/ formaldehyde/ urea resin)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	No (phenol/ formaldehyde/ urea resin)
Japan - ENCS	No (glass fibres)

National Inventory	Status
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (phenol/ formaldehyde/ urea resin)
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (phenol/ formaldehyde/ urea resin)
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	30/09/2021
Initial Date	30/09/2021

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
 PC—STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit.
 IDLH: Immediately Dangerous to Life or Health Concentrations
 ES: Exposure Standard
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index
 AIIC: Australian Inventory of Industrial Chemicals
 DSL: Domestic Substances List
 NDSL: Non-Domestic Substances List
 IECSC: Inventory of Existing Chemical Substance in China
 EINECS: European INventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 NLP: No-Longer Polymers
 ENCS: Existing and New Chemical Substances Inventory
 KECI: Korea Existing Chemicals Inventory
 NZIoC: New Zealand Inventory of Chemicals
 PICCS: Philippine Inventory of Chemicals and Chemical Substances
 TSCA: Toxic Substances Control Act
 TCSI: Taiwan Chemical Substance Inventory
 INSQ: Inventario Nacional de Sustancias Químicas
 NCI: National Chemical Inventory
 FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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