

1. IDENTIFICATION OF THE SUBSTRATE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name/designation: Caltech FCP 225 GSM Reinforcement
Caltech FCP 450 GSM Reinforcement

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

Relevant identified uses: Reinforcing mat for inclusion in liquid applied roof waterproofing systems.

Recommended restrictions: SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen).
SU3 Industrial uses: Uses of substances as such or in preparations* at industrial sites.

1.3 Supplier details

Alumasc Building Products Ltd
White House Works, Bold Road, Sutton, St Helens, Merseyside, United Kingdom, WA9 4JG
Tel: +44 (0)1744 648400
e-mail: technical@alumascroofing.com

1.4 Emergency telephone number

Association / Organisation: National Poisons Information Service
Emergency telephone numbers: 0344 892 0111 (Healthcare professionals only)
Other emergency telephone numbers Alumasc Building Products: +44 17 4464 8400
(Mon-Thurs – 08.30-17.00 Fri – 08.30-16.00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 [1]:
Not applicable.

2.2 Label elements

Hazard pictures: Not applicable.

Signal word: **Not applicable.**

Hazard statements: Not applicable.

Precautionary statements prevention: Not applicable.

Precautionary statements response: Not applicable.

Precautionary statement(s) storage: Not applicable.

Precautionary statements disposal: Not applicable.

2.3 Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

3. COMPOSITION AND INFORMATION ABOUT THE COMPONENTS

3.1 Substances

See 'Composition on ingredients' in Section 3.2.

3.2 Mixtures

Ingredient	Numbers	Classification (EC) 1272/2008	SCL / M-Factor	Nanoform Particle Characteristics	Concentration
Fibreglass Reinforcements	CAS No: 65997-17-3 EC-No: 266-046-0 Index-No: Not available REACH No: Not available	Not Classified [3]	Not available	Not available	98-100 % by weight
Isobutylene Homopolymer	CAS No: 9003-27-4 EC-No: 237-015-9 Index-No: 601-012-00-4 REACH No: Not available	Flammable Gases Category 1, Gases Under Pressure; H220, H280 [2]	Not available	Not available	<2 % by weight

Legend: 1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact:	If this product comes in contact with the eyes: 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:	If skin contact occurs: Gently brush or vacuum off adherent fibres. Wash affected areas thoroughly with water (and soap if available). Seek medical attention if irritation exists and persists.
Inhalation:	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion:	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11.

4.3 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.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Fire Incompatibility:

None known.

5.3 Advice for fire-fighters

Fire-fighting:

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.

Fire/explosion hazard:

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

See Section 8.

6.2 Environmental Precautions

See Section 12.

6.3 Methods and material for containment and cleaning up

Minor spills:

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).

Major spills:

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.

6.4 Reference to other sections

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

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Safe handling:

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).
Limit all unnecessary personal contact.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
Avoid contact with incompatible materials.

Fire and explosion protection:

See Section 5.

Other information:

Store in original containers.
Keep containers securely sealed.
Store in a cool, dry area protected from environmental extremes.
Store away from incompatible materials and foodstuff containers.

7.2 Conditions for safe storage, including any incompatibilities

Suitable container:

Lined metal can, lined metal pail/ can.
Plastic pail.
Polyliner drum.
Packing as recommended by manufacturer.

Storage incompatibility:

Avoid contamination of water, foodstuffs, feed or seed.
Avoid storage and reaction with hydrofluoric or phosphoric acids and concentrated alkalis.
Metals and their oxides or salts may react violently with chlorine trifluoride and bromine trifluoride.
These trifluorides are hypergolic oxidisers. They ignite on contact (without external source of heat or ignition) with recognised fuels - contact with these materials, following an ambient or slightly elevated temperature, is often violent and may produce ignition.
The state of subdivision may affect the results.

7.3 Specific end use(s)

See Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Fibreglass Reinforcements	Not available	6.5 µg/L (Water (Fresh)) 3.4 µg/L (Water - Intermittent release) 174 mg/kg sediment dw (Sediment (Fresh Water)) 164 mg/kg sediment dw (Sediment (Marine)) 147 mg/kg soil dw (Soil) 100 µg/L (STP) 10.9 mg/kg food (Oral)

* Values for General Population.

Occupational Exposure Limits (OEL):

Ingredient data:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not available	Not available	Not available	Not available	Not available	Not available	Not available

Emergency limits:

Ingredient	TEEL-1	TEEL-2	TEEL-3
Fibreglass reinforcements	15 mg/m3	170 mg/m3	990 mg/m3

Ingredient	Original IDLH	Revised IDLH
Fibreglass Reinforcements	Not available	Not available
Isobutylene Homopolymer	Not available	Not available

8.2 Exposure controls

8.2.1. Appropriate engineering Controls:	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. 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. Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment..
8.2.2. Personal protection:	
Eye and face protection:	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.
Skin protection:	See Hand protection below.
Hands/feet protection:	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. 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. Personal hygiene is a key element of effective hand care. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. Polychloroprene. Nitrile rubber. Butyl rubber.
Body protection:	See Other protection below,

Other protection:	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. 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. No special equipment needed when handling small quantities. OTHERWISE: Overalls. Barrier cream. Eyewash unit.									
Respiratory protection:	Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent) - 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. Use appropriate respiratory protective equipment against excessive concentrations of fibrous dusts. <table><tr><td>Airborne Fibre Concentration</td><td>Full Face P2</td><td>Full Face P3</td></tr><tr><td>Above Exposure Limit Value</td><td>Recommended</td><td></td></tr><tr><td>For short-term operation where excursions above the limit value are less than factor of 10</td><td></td><td>Required</td></tr></table> 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.	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
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								

8.2.3. Environmental exposure controls

See Section 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important health, safety and environmental information

Appearance:	White	Relative density (Water =1):	Not available
Physical state:	Solid	Partition coefficient n-octanol / water:	Not available
Odour:	Not available	Auto-ignition temperature(°C):	Not available
Odour threshold:	Not available	Decomposition temperature (°C):	Not available
pH (as supplied):	Not available	Viscosity (cSt):	Not available
Melting point/freezing point (°C):	Not available	Molecular weight (g/mol):	Not available
Initial boiling point and boiling range (°C)	Not available	Taste:	Not available
Flash point (°C):	Not available	Explosive properties:	Not available
Evaporation rate [kg/(s m²)]:	Not available	Oxidising properties:	Not available
Flammability:	Not available	Surface Tension (dyn/cm or mN/m):	Not available
Upper Explosive Limit (%):	Not available	Volatile Component (%vol):	Not available
Lower Explosive Limit (%):	Not available	Gas group:	Not available
Vapour pressure (kPa):	Not available	pH as a solution (1%):	Not available
Solubility in water:	Immiscible	VOC g/L:	Not available
Vapour density (Air = 1)	Not available	Nanoform Particle Characteristics:	Not available
Nanoform Solubility:	Not available		
Particle Size:	Not available		

9.2 Other information

Not available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

See Section 7.2.

10.2 Chemical stability

Product is considered stable and hazardous polymerisation will not occur.

10.3 Possibility of hazardous reactions

See Section 7.2.

10.4 Conditions to avoid

See Section 7.2.

10.5 Incompatible materials

See Section 7.2.

10.6 Hazardous decomposition products

See Section 5.3.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhaled:	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. 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. There is little evidence for acute toxicity after inhalation of mineral fibres.
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	Effects on lungs are significantly enhanced in the presence of respirable particles.
Ingestion:	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.
Skin Contact:	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Man-made mineral fibres may produce mild skin reaction with itching or redness of the skin. This is due to the physical and not from the chemical nature of the substance. They occur particularly around wrists, collars and waistbands, are worsened by sweating and heat, and relieved within a short time after exposure ceases. When products are handled continually, the skin itching often diminishes. Open cuts, abraded or irritated skin should not be exposed to this material.
Eye:	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.
Chronic:	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Insulation wools belong to the generic group of man-made vitreous fibres (MMVF), also known as man-made mineral fibres (MMMF) or synthetic mineral fibres (SMF). The insulation wools are significantly different from other types of MMVF. Overexposure to the breathable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity and chest infections. Repeated exposures in the workplace 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 (1/50000 inch) are present.

Caltech FCP 225 GSM (all grades):

Toxicity	Irritation
Not available	Not available

Fibreglass Reinforcements:

Toxicity	Irritation
Oral (Rat) LD50: >2000 mg/kg[1]	Not available

Isobutylene Homopolymer:

Toxicity	Irritation
dermal (rat) LD50: >2000 mg/kg[1]	Not available
Oral (Rat) LD50: >2000 mg/kg[1]	

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.

Caltech FCP 225 GSM (All Grades) & Fibreglass Reinforcements:	Insulation wools dissolve more readily in body fluids than most other MMVFs and thus do not persist in the lung. Large fibres (e.g. rock wool, special-application fibre glasses, RCF1, amosite and crocidolite asbestos) generally persist longer than small fibres (e.g. insulation fibre glasses, slag wool, and stone wool) and thus are of generally greater toxicity, with effects varying from lung inflammation to cancers..
Fibreglass Reinforcements & Isobutylene Homopolymer:	No significant acute toxicological data identified in literature search.

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.

11.2 Additional information

11.2.1 Endocrine Disruption Properties

Not available.

11.2.2 Other Information

See Section 11.1.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Caltech FCP 225 GSM:

End point	Test duration (Hr)	Species	Value	Source
Not available	Not available	Not available	Not available	Not available

Fibreglass Reinforcements:

End point	Test duration (Hr)	Species	Value	Source
NOEC(ECx)	72h	Algae or other aquatic plants	$\geq 1000\text{mg/l}$	2
EC50	72h	Algae or other aquatic plants	$> 1000\text{mg/l}$	2
LC50	96h	Fish	$> 1000\text{mg/l}$	2

Isobutylene Homopolymer:

End point	Test duration (Hr)	Species	Value	Source
EC50(ECx)	96h	Algae or other aquatic plants	0.009-1.099mg/l	2
EC50	72h	Algae or other aquatic plants	$> 19.2\text{mg/l}$	2
EC50	48h	Crustacea	0.04mg/l	2
LC50	96h	Fish	0.001-1.19mg/l	2
EC50	96h	Algae or other aquatic plants	0.009-1.099mg/l	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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

For synthetic vitreous fibres:

Environmental Fate: Synthetic vitreous fibres are non-volatile and generally insoluble, therefore, they tend to settle out of air and water and deposit in soil or sediment. These fibres are not known to undergo any significant transformation or degradation in air, sediment or soil or water. The silicate network of all synthetic vitreous fibres can be attacked by acids or alkaline solutions but this does not occur to any significant extent under environmentally relevant conditions. The dissolution rates of glass, rock, and slag wools with diameters of 1 μm were reported as 0.4, 1.2, and 2.0 years, respectively.

Bio-soluble wools are expected to solubilise over a period of weeks to months in most ecosystems.

12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Isobutylene Homopolymer	LOW	LOW

12.3 Bioaccumulation potential

Ingredient	Bioaccumulation
Isobutylene Homopolymer	LOW (LogKOW = 2.2256)

12.4 Mobility in soil

Ingredient	Mobility
Isobutylene Homopolymer	LOW (LogKOW = 2.2256)

12.5 Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not available	Not available	Not available
PBT	✗	✗	✗
vPvB	✗	✗	✗
PBT Criteria fulfilled?			
vPvB			

12.6 Endocrine disruption properties

Not available.

12.7 Other adverse effects

Not available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal Considerations:	Disposal of this product and its packaging must comply with all applicable environmental protection and waste disposal legislation, including any requirements set by local authorities. Any unwanted or non-recyclable material should be disposed of through a licensed waste disposal contractor. Transportation of such waste may be subject to ADR (International Carriage of Dangerous Goods by Road) regulations and must be managed in accordance with those requirements.
Waste code:	Uncured product: 08 01 11* waste paint and varnish containing organic solvents or other hazardous substances. Cured product inert residue: 17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 Empty metal paint tins with only hardened, inert residue: 15 01 04 metallic packaging
Special precautions:	This material and its container must be disposed of in a safe way. Caution should be exercised when handling empty containers that have not been properly cleaned or rinsed, as they may retain hazardous residues. Spillage and wash water from cleaning tools must be prevented from entering soil, watercourses, drains, or sewer systems. Empty containers should be directed to authorised waste disposal or appropriate local recycling facilities.
Further information available via:	https://www.alumascroofing.com/downloads/disposal-guides/ 

14. TRANSPORT INFORMATION

Labels required:

Not applicable.

Marine Pollutant: No.

Hazchem: Not applicable.

Land transport (ADR):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Class: Not applicable Subrisk: Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	Hazard identification (Kemler): Not applicable Classification code: Not applicable Hazard label: Not applicable Special provisions: Not applicable Limited quantity: Not applicable Tunnel restriction code: Not applicable

Air transport (ICAO-IATA/DGR):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	ICAO/IATA class: Not applicable ICAO/IATA subrisk: Not applicable ERG code: Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	Special provisions: Not applicable Cargo only packing instruction: Not applicable Cargo only maximum qty/pack: Not applicable Passenger and cargo packing instruction: Not applicable Passenger and cargo maximum qty/pack: Not applicable Passenger and cargo limited qty packing instructions: Not applicable Passenger and cargo limited maximum qty/pack: Not applicable

Sea transport (IMDG-Code/GGVSee):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	IMDG class: Not applicable IMDG subrisk: Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	EMS number: Not applicable Special provisions: Not applicable Limited quantities: Not applicable

Inland waterways transport (ADN):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	Classification code: Not applicable Special provisions: Not applicable Limited quantity: Not applicable Equipment required: Not applicable Fire cones numbers: Not applicable

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

Not applicable.

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

Product Name	Group
Fibreglass Reinforcements	Not available
Isobutylene Homopolymer	Not available

14.9 Transport in bulk in accordance with the ICG Code

Product Name	Ship Type
Fibreglass Reinforcements	Not available
Isobutylene Homopolymer	Not available

15. REGULATORY INFORMATION

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

Fibreglass Reinforcements is found on the following regulatory lists:

International WHO List of Proposed Occupational Exposure Limit (OEL).
Values for Manufactured Nanomaterials (MNMS).

Isobutylene Homopolymer is found on the following regulatory lists:

Not applicable.

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable: Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

National inventory status:

National Inventory	Status
Australia - AIIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (fibreglass reinforcements; isobutylene homopolymer)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (fibreglass reinforcements)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
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.

16. OTHER INFORMATION

Full text risk and hazard codes:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

SDS version summary:

Version	Date of Update	Section Updated
1.1	14/06/2023	Template change
2.0	27/05/2025	Section 13 update

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.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms
EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices

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
AIRC: 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

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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