FIBERFRAX MOULDABLE AP50-100

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 30/06/2022 Revision date: 30/06/2022 Version: 1.00

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

1.1. Product identifier

Product form : Mixture
Trade name : FIBERFRAX MOULDABLE AP50-100
UFI : GU5A-Y0RV-G00U-SWC7

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

1.2.1. Relevant identified uses

Use of the substance/mixture : For industrial use within high temperature applications.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Alkegen (formerly Unifrax)
Mill Lane, Rainford
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United Kingdom
T + 44 (0) 1744 88 7600 - F + 44 (0) 1744 88 9916

Email competent person
reachsds@alkegen.com

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Distributor
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Alkegen (formerly Unifrax)
Via Volonterio 19
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Distributor
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Spain
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1.4. Emergency telephone number

Emergency number : Occupational Hygiene and CARE: Tel: + 44 (0) 1744 887603; Email: reachsds@alkegen.com; (8.15-17.10 h); Language : English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1	H317
Carcinogenicity (inhalation) Category 1B	H350i

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS07 GHS08

Signal word (CLP) : Danger

Contains : 2-methyl-2H-isothiazol-3-one, Aluminosilicate refractory ceramic fibres

Hazard statements (CLP) : H317 - May cause an allergic skin reaction.
H350i - May cause cancer by inhalation.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P261 - Avoid breathing dust, mist, spray.
P280 - Wear protective gloves, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P308+P313 - IF exposed or concerned: Get medical advice/attention.

Extra phrases : Restricted to professional users.

2.3. Other hazards

Other hazards which do not result in classification : May cause mechanical irritation to the skin, eyes and respiratory system.

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
aluminium oxide (1344-28-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Aluminosilicate refractory ceramic fibres (142844-00-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-methyl-2H-isothiazol-3-one (2682-20-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Aluminosilicate refractory ceramic fibres(142844-00-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
aluminium oxide substance with national workplace exposure limit(s) (GB)	CAS-No.: 1344-28-1 EC-No.: 215-691-6 REACH-no: 01-2119529248-35-xxxx	≥ 25 – < 50	Not classified
Aluminosilicate refractory ceramic fibres substance listed as REACH Candidate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit (Note A)(Note R)	CAS-No.: 142844-00-6 EC Index-No.: 650-017-00-8 REACH-no: 01-2119458050-50-0000	≥ 10 – < 20	Carc. 1B, H350i
2-methyl-2H-isothiazol-3-one	CAS-No.: 2682-20-4 EC-No.: 220-239-6 EC Index-No.: 613-326-00-9 REACH-no: 01-2120764690-50-xxxx	< 0.1	Acute Tox. 2 (Inhalation), H330 (ATE=0.1 mg/l/4h) Acute Tox. 3 (Dermal), H311 (ATE=242 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=120 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
2-methyl-2H-isothiazol-3-one	CAS-No.: 2682-20-4 EC-No.: 220-239-6 EC Index-No.: 613-326-00-9 REACH-no: 01-2120764690-50-xxxx	(0.0015 ≤C ≤ 100) Skin Sens. 1A, H317

Note A : Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3. In Part 3, use is sometimes made of a general description such as '... compounds' or '... salts'. In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.
Note R: The harmonised classification as a carcinogen applies except in the case of fibres with a Length Weighted Geometric Mean Diameter (LWGMD) minus two geometric standard errors greater than 6 µm, as measured in accordance with Test method A.22 in the Annex to Commission Regulation (EC) No 440/2008.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Liquid product : Inhalation unlikely.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. Get medical advice if skin irritation persists.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : mechanical irritation. Allergic reactions.
Symptoms/effects after eye contact : mechanical irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : The product is not flammable. Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.
Emergency procedures : Prohibit unauthorized persons.

6.1.2. For emergency responders

Protective equipment : Ensure adequate ventilation. Concerning personal protective equipment to use, see section 8.
Emergency procedures : Manipulations are to be done only by qualified and authorised persons.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Dry debris may be vacuum cleaned using a HEPA (High efficiency particulate arrester) filtered vacuum.
Other information : Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Use personal protective equipment as required. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Clean contaminated areas thoroughly. Ensure good ventilation of the work station.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Product must only be kept in the original packaging. Store tightly closed in a dry and cool place. Protect against frost.
Storage temperature	:	5 – 20 °C
Information about storage in one common storage facility	:	Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

For professional users only. See Section 8. Exposure scenarios.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

aluminium oxide (1344-28-1)	
United Kingdom - Occupational Exposure Limits	
Local name	Aluminium oxides
WEL TWA (OEL TWA) [1]	10 mg/m³ inhalable dust 4 mg/m³ respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Aluminosilicate refractory ceramic fibres (142844-00-6)	
EU - Binding Occupational Exposure Limit (BOEL)	
Local name	Refractory ceramic fibres which are carcinogens
BOEL TWA	0.3 fibers/ml
Regulatory reference	DIRECTIVE (EU) 2019/130 (amending Directive 2004/37/EC)
United Kingdom - Occupational Exposure Limits	
Local name	Refractory ceramic fibres and special purpose fibres
WEL TWA (OEL TWA) [1]	5 mg/m³ total inhalable dust
WEL TWA (OEL TWA) [2]	0.3 fibers/ml respirable fraction
Remark	Carc (Capable of causing cancer and/or heritable genetic damage)
Recommended monitoring procedures The UK follow MDHS 59 specific for MMVF	“Man-made mineral fibre - Airborne number concentration by phase-contrast light microscopy” and MDHS 14/3 “General methods for sampling and gravimetric analysis of respirable and inhalable dust”. WHO-EURO method: Determination of airborne fibre number concentrations; A recommended method, by phase-contrast optical microscop
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

2-methyl-2H-isothiazol-3-one (2682-20-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	0.043 mg/m³

Long-term - local effects, inhalation	0.021 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0.053 mg/kg bodyweight/day
Acute - local effects, inhalation	0.043 mg/m³
Long-term - systemic effects,oral	0.027 mg/kg bodyweight/day
Long-term - local effects, inhalation	0.021 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	3.39 µg/L
PNEC aqua (marine water)	3.39 µg/L
PNEC aqua (intermittent, freshwater)	3.39 µg/L
PNEC aqua (intermittent, marine water)	3.39 µg/L
PNEC (Soil)	
PNEC soil	0.047 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.23 mg/l

Aluminosilicate refractory ceramic fibres (142844-00-6)	
DNEL/DMEL (additional information)	
long term - Local, Inhalation	2,17 f/ml

Additional information : Aluminosilicate refractory ceramic fibres. The DNEL cited in the long term exposure section above is based on the incidence of lung tumours (non-significant at all treatment levels) in a multi-dose rat study reported by Mast et al (Inhalation Toxicology, 1995, 7(4), 469-502) which demonstrates a NOAEL of 162 f/ml and leads to the calculated endpoint-specific DNEL of 2.17 f/ml.

SCOEL have recommended an BOELV for RCF of 0.3 f/ml based on measured lung function in exposed workers. Assuming 45 years exposure, the average cumulative exposures of 147.9 (all workers in the high exposure group) and 184.8 fmo/ml (workers 60+ years of age in the high exposure group) - equivalent to average fibre concentrations of 0.27 and 0.34 f/ml respectively- were considered as no observed adverse effect levels for lung function and SCOEL therefore proposed an BOELV of 0.3 f/ml. This is considerably lower than the calculated DNEL value.

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses. Safety glasses with side shields. EN 166

8.2.2.2. Skin protection

Skin and body protection:
Impervious clothing. Do not take working clothes home

Hand protection:
Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

8.2.2.3. Respiratory protection

Respiratory protection:
If dust are formed : Wear appropriate mask. (FFP3)

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use; Do not take working clothes home; Separate working clothes from town clothes. Launder separately
Uses and Risk Management Measures (RMM)

Intended use
Secondary use – Conversion into wet and dry mixtures and articles.
Process would include: Mixing forming operations, handling of RCF/ASW products, assembly of RCF/ASW containing products, machine and hand finishing of RCF/ASW products.
Reference ES 2*
RMM - Hierarchy of Controls
- Where it is practical to do so, automatically feed RCF/ASW in to the process
- Where practical to do so, segregate dry and wet processing
- Enclose the process where practically possible.
- Where practical to do so, segregate machine areas and restrict access to operators involved in the process.
- Enclose Machines as far as practically possible.
- Install LEV where possible, when machine finishing, handling, compressing and hand cutting to remove dust at source
- Employ experienced personnel – trained in the correct use of fibrous products
- PPE and RPE used for all dusty tasks
- Provide vacuum cleaner connection point to central system where practical or use a portable HEPA vacuum
- Regular clean up – using a wet scrubbing unit where practically possible and in general a HEPA vacuum should be used.
- Dry brushing and use of compressed air should be prohibited
- Waste materials to be contained at source, labelled and stored separately for disposal or recycling.

Intended use
Tertiary use - maintenance and service life (Industrial or professional use)
Process: Small scale repairs involving removal and installation of RCF/ASW products. Use of the product in an enclosed system, where there is occasional control access or no access.
Reference ES 3*
RMM - Hierarchy of Controls
- Use pre-cut, pre-sized pieces where practically possible.
- Allow access only to trained (authorised) operators
- Where practically possible, perform all hand cutting in a segregated area, on a down draft bench.
- Clean up work area regularly during the shift using a HEPA equipped vacuum cleaner.
- Prohibit use of dry brushing and compressed air cleaning.
- Bag and seal waste immediately at source.
- Use PPE and RPE appropriate to task.
- Employ good hygiene practices.

Intended use
Tertiary use- installation and removal (industrial or professional).
Large scale removal and installation of RCF/ASW from Industrial processes.
Large scale removal and installation by professionals.
Reference ES 4*
RMM - Hierarchy of Controls
- Where practically possible enclose or segregate the work area.
- Allow only authorised personnel.
- Pre-wet insulation prior to removal where practically possible.
- Where practically possible use a water lance for removal or vacuum-truck.
- Use down draft bench for hand cutting products.
- Cover pre-cut section during transport and storage to prevent secondary exposure.
- Where practically possible provide multiple vacuum hoses for convenient cleanup of spillage or use portable HEPA filtered vacuums.
- Bag waste materials immediately at source
- Prohibit use of dry brushing and or compressed air cleaning.
- Experienced personnel only
- Use appropriate PPE and RPE appropriate to expected concentrations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	white.
Appearance	:	Paste.
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	> 1650 °C Fibres
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Non oxidizing.
Explosive limits	:	Not applicable
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not self-igniting
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Water: Slightly soluble
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	1720 kg/m³
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Other properties : Length weighted geometric mean diameter of fibres contained in the product: 1.4 - 3 µm

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

No additional information available.

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	May cause cancer by inhalation.
Additional information	:	Method: Nose only Inhalation. Multi-dose Species: Rat, Dose: 3 mg/m3, 9 mg/m3 and 16 mg/m3 for 24 months Results: Minimal to mild lung fibrosis at 9mg/m3 and 16 mg/m3. No evidence of RCF-related lung tumours at "any of these doses." Method: Nose only Inhalation. Single dose Species: Rat, Dose: 30 mg/m3. Results: This study was designed to test the chronic toxicity and carcinogenicity of RCF at extreme exposures. Tumour incidence (incl. mesothelioma) was raised at this dose level. The presence of overload conditions (only detected after the experiment was completed), whereby the delivered dose exceeded the clearance capability of the lung, makes meaningful conclusions in terms of hazard and risk assessment difficult.
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Other information : Basic toxicokinetic

Exposure is predominantly by inhalation or ingestion. Man made vitreous fibres of a similar size to RCF/ASW have not been shown to migrate from the lung and/or gut and do not become located in other parts of the body When compared to many naturally occurring minerals, RCF/ASW has a low ability to persist and accumulate in the body (half-life of long fibres (> 20 µm) in 3 week rat inhalation test is approx. 60 days).

Human toxicological data

In order to determine possible human health effects following RCF exposure, the University of Cincinnati has been conducting medical surveillance studies on RCF workers in the U.S. The Institute of Occupational Medicine (IOM) has conducted medical surveillance studies on RCF workers in European manufacturing facilities.

Pulmonary morbidity studies among production workers in Europe and USA have demonstrated an absence of interstitial fibrosis and no loss in lung function was observed in the longitudinal study with RCF exposure.

A statistically significant correlation between pleural plaques and cumulative RCF exposure was evidenced in the USA longitudinal study.

The USA mortality study did not show evidence of increased lung tumour development either in the lung parenchyma or in the pleura.

Irritant Properties

Negative results have been obtained in animal studies (EU method B 4) for skin irritation. Inhalation exposures using the nose only route produce simultaneous heavy exposures to the eyes, but no reports of excess eye irritation exist. Animals exposed by inhalation similarly show no evidence of respiratory tract irritation.

Human data confirm that only mechanical irritation, resulting in itching, occurs in humans, Screening at manufacturers' plants in the UK has failed to show any human cases of skin conditions related to fibre exposure.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

2-methyl-2H-isothiazol-3-one (2682-20-4)	
EC50 - Crustacea [1]	0.934 mg/l (48 h; Daphnia magna; (OECD 202 method))
EC50 72h algae	0.103 mg/l (72 h, Pseudokirchneriella Subcapita; (OECD 201 method))
ErC50 algae	0.072 mg/l (OECD 201 method)
NOEC chronic fish	4.93 mg/l (98 d; Oncorynchus mykiss; (OECD 210 method))
NOEC chronic crustacea	0.044 mg/l (21 d; Daphnia magna; (OECD 211 method))
NOEC chronic algae	0.05 mg/l (5 d; Pseudokirchneriella subcapitata; (OECD 201 method))

12.2. Persistence and degradability

aluminium oxide (1344-28-1)	
Persistence and degradability	Not applicable.

2-methyl-2H-isothiazol-3-one (2682-20-4)	
Persistence and degradability	Not readily biodegradable. (OECD 301B method). (OECD 301D method).

Aluminosilicate refractory ceramic fibres (142844-00-6)	
Persistence and degradability	Not applicable for inorganic substances.

12.3. Bioaccumulative potential

FIBERFRAX MOULDABLE AP50-100	
Partition coefficient n-octanol/water (Log Pow)	Not applicable

aluminium oxide (1344-28-1)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Bioaccumulative potential	Not applicable.

2-methyl-2H-isothiazol-3-one (2682-20-4)	
Partition coefficient n-octanol/water (Log Pow)	-0.486 (20 °C)
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

2-methyl-2H-isothiazol-3-one (2682-20-4)	
Surface tension	68.8 mN/m (19 °C, EEC Method A5)
Ecology - soil	Low mobility (soil).

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code : 16 03 03* - inorganic wastes containing dangerous substances
HP Code : HP7 - “Carcinogenic:” waste which induces cancer or increases its incidence

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Not applicable

Transport by sea

Transport regulations (IMDG) : Not applicable

Air transport

Transport regulations (IATA) : Not applicable

Inland waterway transport

Transport regulations (ADN) : Not applicable

Rail transport

Transport regulations (RID) : Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
28.	Aluminosilicate refractory ceramic fibres
3(b)	FIBERFRAX MOULDABLE AP50-100

Contains a substance on the REACH candidate list: Aluminosilicate refractory ceramic fibres (CAS 142844-00-6)

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Other information, restriction and prohibition regulations : Take note of Directive 94/33/EC on the protection of young people at work. Take note of Directive 92/85/EC on the safety and health of pregnant workers at work.

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

United Kingdom

National regulations : Take note of Directive 92/85/EC on the safety and health of pregnant workers at work.

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Aluminosilicate refractory ceramic fibres

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
DMEL	Derived Minimal Effect level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PNEC	Predicted No-Effect Concentration
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit

Data sources : Information provided by the manufacturer. European Chemicals Agency, http://echa.europa.eu/.

Other information : Occupational Hygiene: dawn.webster@alkegen.com.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 1B	Carcinogenicity (inhalation) Category 1B
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H350i	May cause cancer by inhalation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Sens. 1	H317	Calculation method
Carc. 1B	H350i	Expert judgment

KFT SDS EU 06

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