According to regulation (EC) No. 1907/2006 (REACH) amended by Regulation (EU) 2020/878

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Product identifier
Trade name : Isofrax products
Type of product:
This product is an article under the REACH definition. As the Classification and labelling regulations (CLP) strictly applies to substances and mixtures it does not make provision for articles. However this product SDS and the defined labelling is provided voluntarily. As a duty of care to the user.

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
No additional information available

1.4. Emergency telephone number
No additional information available

1.5 Identification of the company

INSULCON B.V.	**INSULCON N.V.**	**INSULCON GMBH**
Zilverhoek 4, 4651 SP STEENBERGEN	Belgium	Germany
Tel. : +31 (0)167-565750	Tel. : + 32 (0)3 711.02.78	Tel.: + 49 (0) 2131-408548-0
Website: www.insulcon.com		
Email: info@insulcon.com		

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance/mixture
Classification according to regulation (EC) No 1272/2008 (CLP)
Not classified

Adverse physicochemical, human health and environmental effects
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

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

Extra phrases:
This product is an article and has not to be classified and labelled according to the current laws and regulations.

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2.3. Other hazards

Other hazards not contributing to the classification:
May cause mechanical irritation to the skin, eyes and respiratory system.

PBT: not relevant – no registration required vPvB: not relevant – no registration required
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

3. COMPOSITION / INFORMATION OF INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Comments
Article
All products contain AES wool (synthetic fibres, alkaline earth silicate, CAS 436083-99-7). Substance with national workplace exposure limit(s) Isofrax products are ready to use products in high temperature applications.

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II.

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:	Fibrous dust may be liberated when handling in use. If irritation to nose and throat, move to fresh air.
First-aid measures after skin contact:	Gently wash with plenty of soap and water.
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:	Ingestion unlikely. Drink plenty of water.

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

Symptoms/effects after inhalation:	mechanical irritation.
Symptoms/effects after skin contact:	mechanical irritation.
Symptoms/effects after eye contact:	mechanical irritation.

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

Treat symptomatically

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5. FIRE FIGHTING 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

Fire hazard : Non flammable.
Explosion hazard : Product is not explosive.
Hazardous decomposition products in case of fire: None.

5.3 Advice for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

General measures Avoid dust formation. Do not breathe dust. Avoid contact with skin and eyes.

6.1.1 For non-emergency personnel

Protective equipment: Concerning personal 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: : Prohibit unauthorized persons.

6.2 Environmental precautions

Avoid release to the environment

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Mechanically recover the product. Minimize generation of dust. High efficiency particulate air filter (HEPA filter)
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.

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7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Additional hazards when processed: Extraction to remove dust at its source.

Precautions for safe handling:

Obtain special instructions before use. Use personal protective equipment as required. Ensure good ventilation of the work station. Do not eat, drink or smoke when using this product. Avoid dust formation. Do not breathe dust. Avoid contact with eyes. Clean contaminated areas thoroughly.

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.

Prohibitions on mixed storage: Keep away from food, drink and animal feeding stuff.

7.3 Specific use(s)

For professional users only. See Heading 8.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

8.1.1 National occupational exposure and biological limit values

EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Man made vitreous fibers (MMVF)
Remark	The NOEL of 30 x 10^6 WHO-f/m3 or 10 x 10^6 f with l > 20 µm is used as the starting point to derive an OEL. Taking into account this well defined NOEL, a LOEL at fivefold higher concentrations, and the absence of a carcinogenic potential in long term inhalation studies allows to apply the small uncertainty factor of 3 resulting in the OEL of 10 f/ml (10x10^6 fibres /m3 or 1 mg/m^3). (Year of adoption 2002)
Regulatory reference	SCOEL Recommendations

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United Kingdom - Occupational Exposure Limits	
Local name	MMMF (Machine-made mineral fibre)
WEL TWA (OEL TWA) [1]	5 mg/m³ (except for refractory ceramic fibres and special purpose fibres)
WEL TWA (OEL TWA) [2]	2 fibers/ml (except for refractory ceramic fibres and special purpose fibres)
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
No additional information available

8.1.5. Control banding
No additional information available

8.2.1. Appropriate engineering controls
Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment
8.2.2.1. Eye and face protection
Eye protection:
In case of dust production: protective goggles

8.2.2.2. Skin protection
Skin and body protection:
Wear suitable protective clothing

Hand protection:
Leather protective gloves

8.2.2.3. Respiratory protection
Respiratory protection:
Dust formation: dust mask. (FFP2)

8.2.2.4. Thermal hazards
No additional information available

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8.2.3. Environmental exposure controls
Environmental exposure controls: Avoid release to the environment.

Other information:
Do not eat, drink or smoke when using this product. Do not take working clothes home. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White. Beige.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: 1500 – 1550 °C Fibres
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not specifically applicable
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Water: < 1 mg/l Fibres

Partition coefficient n-octanol/water (Log Kow): Not available

Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 2.6 g/cm³ Fibres
Relative density	: 2.6 Fibres
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

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9.2.1. Information with regard to physical hazard classes
No additional information available

9.2.2 Other information
Other properties : Length weighted geometric mean diameter of fibres contained in the product 1,9 – 6 µm

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. Do contain organics and on first heating can liberate VOCs.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity dermal) 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:
Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity:
Not classified (Based on available data, the classification criteria are not met)

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Carcinogenicity:
Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity:
Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (single exposure):
Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (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
Other information:
Irritant Properties
When tested using approved methods (Directive 67/548/EC, Annex V, Method B4), fibres contained in this material give negative results. Man-made mineral fibres, can produce a mild irritation resulting in itching or rarely, in some sensitive individuals, in slight reddening. Unlike other irritant reactions this in not the result of allergy or chemical skin damage but is caused by a temporary mechanical effect.

Other animal studies
These materials have been designed to allow rapid clearance from lung tissue. And this low bio-persistence has been confirmed in many studies on AES using EU protocol ECB/TM/*27 (rev.7). When inhaled, even at very high doses, they do not accumulate to any level capable of producing a serious adverse biological effect. In lifetime chronic studies there was no exposure-related effect more than would be seen with any “inert” dust.

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:

Not classified (Based on available data, the classification criteria are not met)
(chronic)

12.2 Persistence and degradability

Persistence and degradability	Not applicable.

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12.3 Bioaccumulative potential

Bioaccumulative potential	Not applicable.

12.4 Mobility in soil

Ecology - soil	Not applicable.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

No additional information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste treatment methods:

Disposal must be done according to official regulations. European waste catalogue.

Sewage disposal recommendations:

Do not allow into drains or water courses.

Product/Packaging disposal recommendations:

Do not dispose of with domestic waste

14. TRANSPORT INFORMATION

In accordance with ADR, RID, IATA, IMDG, ADN.

ADR	IMDG	IATA	AND	RID
14.1 UN 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
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.				

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14.6 Special precautions for user

- Overland transport
Transport regulation (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 Transport in bulk according to IMO instruments

Not applicable.

15. REGULATORY INFORMATION

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

15.1.1 EU Regulations:

Other information, restriction and prohibition:
This product is an article and has not to be classified and labelled according to the current regulations laws and regulations. A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis.

REACH Annex XVII (Restriction List)	Not applicable.
REACH Annex XIV (Authorisation List)	Not applicable.
REACH Candidate List (SVHC)	Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Drug Precursors Regulation (273/2004)
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No additional information available

16. OTHER INFORMATION

Abbreviations and acronyms:

Abbreviations and acronyms:	
ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen sur le transport des marchandises dangereuses par Route (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 Code for 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

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

. CARE PROGRAMME
ECFIA, representing the high temperature insulation wool (HTIW) industry, has undertaken an extensive industrial hygiene programme to provide assistance to the users of all products containing HTIW.
The objectives are twofold:

- to monitor workplace dust concentrations at both manufacturers' and customers' premises.
- to document manufacturing and use of HTIW products from an industrial hygiene perspective in order to establish appropriate recommendations to reduce exposures.

. PRECAUTIONARY MEASURES TO BE TAKEN AFTER SERVICE UPON REMOVAL

In almost all applications high temperature insulating wools products (HTIW) are used as an insulating material helping to maintain temperature at 900°C or more in a closed space. As produced, HTIW are vitreous (glassy) materials which, upon continued exposure to elevated temperatures (above 900 °C) might de-vitrify. The occurrence and extent of crystalline phase formation is dependent on the duration and temperature of exposure, fibre chemistry and/or the presence of fluxing agents. As only a thin layer of the insulation hot face side is exposed to high temperature, respirable dust generated during removal operations does not typically contain detectable levels of crystalline silica (CS).
In applications where the material is heat soaked, duration of heat exposure is normally short and a significant de-vitrification allowing CS to build up does not occur. This is the case for waste mould casting for instance.

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ISOFRAX PRODUCTS

Toxicological evaluation of the effect of the presence of CS in artificially heated HTIW material has not shown any increased toxicity in vitro and in vivo. The results from different combinations of factors like increased brittleness of fibres, or microcrystals embedded in the glass structure of the fibre and therefore not biologically available may explain the lack of toxicological effects.

IARC evaluation as provided in Monograph 68 is not relevant as CS is not biologically available in after service HTIW and respirable dust generated during removals operations generally do not contain detectable levels of crystalline silica..

High concentrations of fibres and other dusts may be generated when after-service products are mechanically disturbed during operations such as wrecking. Therefore ECFIA recommends:

- control measures are taken to reduce dust emissions; and
- all personnel directly involved wear an appropriate respirator to minimise exposure and comply with local regulatory limits.

Articles under REACH (EC) No 1907/2006
Blankets
Papers and Felts Flexilite-MC Paper Flexilite-MC Felt
Papers and Felts Isofrax 880 paper
Boards and Shapes Isofrax Board 120LD, Boiler parts 110CM, Isofrax board 120WT, Isofrax board 120MD
Boards and Shapes Millboard 120KB
Boards and Shapes Isofrax Board 120ZK
Boards and Shapes Isofrax fire products
Boards and Shapes Boiler Parts 120BA
Boards and Shapes Silin HT
Boards and Shapes Isofrax Rigiform 120, 120HD, 120s
Specialty products Isofrax Flexiform 120
Bonded Modules
Textiles
Specialty products Moist pak HD

*Articles can contain either inorganic or organic binders, all of which have been evaluated based on supplier information under CLP/(EC) 1272/2008

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