

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

1.1. Product identifier

Product form	: Substance (UVCB)
Trade name	: FLAME PARE - contains alkaline earth silicate wool (SAT wool)
IUPAC name	: Technically not possible by following the rules of the IUPAC
EC Index-No.	: 610-130-5
CAS-No.	: 436083-99-7
REACH registration No	: 01-2119457644-32
Product code	: 528290
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Use of the substance/mixture	: Pare Flamme- Application as thermal insulation, heat shields, gaskets and expansion joints in industrial furnaces, ovens, boilers and other heat treatment equipment in the automotive and aerospace industries, as well as fire protection systems and Fire walls. (Please refer to the specific technical data sheets for more information).
Function or use category	: Insulating agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

VIRAX SAS

39, quai Marne
CS 40197
51206 EPERNAY Cedex

Tel: +33 (0)3 26 59 56 56 - Fax:+33 (0)3 26 59 56 60

Contact: hse@virax.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU 2015: According to Regulation (EU) 2015/830 (REACH Annex II)

Not classified. The substance is exempt from classification according to the Q note described in the CLP Regulation

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display Extra classification(s) to display

No labelling applicable

The fibers contained in this product are therefore unclassified and do not require labeling according to CLP

2.3. Other hazards

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

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

classification

SECTION 3: Composition/information on ingredients

3.1. Substances

Comments	: Note Q : The classification as a carcinogen need not apply if it can be shown that the substance fulfils one of the following conditions: — a short term biopersistence test by inhalation has shown that the fibres longer than 20 µm have a weighted half-life less than 10 days; or — a short term biopersistence test by intratracheal instillation has shown that the fibres longer than 20 µm have a weighted half-life less than 40 days; or — an appropriate intra-peritoneal test has shown no evidence of excess carcinogenicity; or — absence of relevant pathogenicity or neoplastic changes in a suitable long term inhalation test.
Substance type	: UVCB
Name	: AES wool (synthetic, alkaline earth silicate fibers)
CAS-No.	: 436083-99-7
EC Index-No.	: 610-130-5

Name	Product identifier	%
AES wool (synthetic, alkaline earth silicate fibers) COMPOSITION An alkaline earth silicate (AES) * containing 70 to 80% SiO ₂ and 18 to 27% MgO Definition of AES: consists of silica (50-82% by weight), calcium and magnesium (18-43% by weight), alumina, titanium and zirconium (less than 6% by weight) and traces of oxides.	(CAS-No.) 436083-99-7 (EC Index-No.) 610-130-5 (REACH-no) 01-2119457644-32	100

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Do not scrub or scratch the skin that has been touched.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Obtain medical attention if pain, blinking or redness persists. Do not rub your eyes.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No supplementary information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
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	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. 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

Emergency procedures	: Evacuate unnecessary personnel.
Measures in case of dust release	: In case of dust production: keep upwind.

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area but avoid exposure to wind. Do not use compressed air for cleaning. Prevent spreading in sewers. PREVENT DISPERSION OF DUST. Solid spill: wet with water or cover with foam.

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

- For containment : Recover the cleaning water for later disposal.
Methods for cleaning up : Prevent dispersion by moistening spill with water or foam. On land, sweep or shovel into suitable containers. Do not use compressed air for cleaning. Minimize generation of dust.
Collect the fragments and use a vacuum cleaner equipped with a high efficiency filter (HEPA).

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not breathe dust. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Ensure adequate air ventilation. Keep only in original container. Keep container closed when not in use.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

See Heading 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Local exhaust is needed at source of dust. Do not use compressed air to fill, handle or work up.

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:

Wear suitable protective clothing

Hand protection:

Wear protective gloves

Eye protection:

Safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask. (FFP2). Use a full-face respirator, selected in accordance with EN 529

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Fibrous.
Colour	: white.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: > 1200 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 2,6
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: None known.
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

See Heading 16.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Additional information	: Based on available data, the classification criteria are not met. Artificial mineral fibers, as well as some natural fibers, can cause benign irritation with itching or, rarely, in some sensitive people, a slight redness. Unlike other irritating reactions, it is not the result of an allergy or chemical interaction with the skin, but is caused by temporary mechanical effects.
Serious eye damage/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

12.2. Persistence and degradability

FLAME PARE - contains alkaline earth silicate wool (SAT wool) (436083-99-7)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

FLAME PARE - contains alkaline earth silicate wool (SAT wool) (436083-99-7)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information	: Avoid release to the environment
------------------------	------------------------------------

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container at hazardous or special waste collection point.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 07 02 99 - wastes not otherwise specified

SECTION 14: Transport information

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

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.1. UN number

UN-No. (ADR) : Not regulated
UN-No. (IMDG) : Not regulated
UN-No. (IATA) : Not regulated
UN-No. (ADN) : Not regulated
UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Not regulated

- Transport by sea

Not regulated

- Air transport

Not regulated

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not established.

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

FLAME PARE - contains alkaline earth silicate wool (SAT wool) is not on the REACH Candidate List

FLAME PARE - contains alkaline earth silicate wool (SAT wool) is not on the REACH Annex XIV List

15.1.2. National regulations

Ensure all national/local regulations are observed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Comments	Added	
	Supersedes	Modified	
	Revision date	Modified	
	SDS EU format	Added	
	Date of issue	Modified	
1.1	EC Index-No.	Added	
1.1	CAS-No.	Added	
1.1	REACH registration No	Added	
1.2	Use of the substance/mixture	Modified	
1.2	Intended for general public	Removed	
2.3	Other hazards not contributing to the classification	Added	
6.1	Emergency procedures	Modified	
7.2	Incompatible products	Removed	
8.2	Respiratory protection	Modified	
8.2	Eye protection	Modified	
10.6	Hazardous decomposition products	Added	
12.1	Ecology - general	Added	
16	Training advice	Added	

Abbreviations and acronyms:

REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DSD	Dangerous Substances Directive 67/548/EEC
DPD	Dangerous Preparations Directive 1999/45/EC
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
BCF	Bioconcentration factor
TLM	Median Tolerance Limit
ATE	Acute Toxicity Estimate
EC50	Median effective concentration
LC50	Median lethal concentration
LD50	Median lethal dose
PNEC	Predicted No-Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative

FLAME PARE - contains alkaline earth silicate wool (SAT wool)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: Ensure all national/local regulations are observed. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

PRECAUTIONS TO BE TAKEN AFTER USING AND DISMANTLING : In almost all applications, high temperature insulation wool products (HTIW) are used as a thermal insulation material to help maintain the temperature at 900 °C or higher in an enclosed space. As they are produced, Isofrax fibers are vitreous materials which in the case of continuous exposure to high temperatures (above 900 °C) could devitrify. This could occur with the formation of a crystalline phase, the extent of which would depend on the duration and temperature of the exposure, the chemical composition of the fibers and / or the presence of fluxes. Since only a thin layer of the hot insulation surface is exposed to a high temperature, the respirable dust released during the dismantling operations does not contain detectable levels of crystalline silica (CS).

In applications where the material is subjected to thermal stress, the duration of exposure to heat is normally short and significant devitrification allowing the accumulation of SC does not occur. This is the case, for example, in the molding of waste.

Toxicological evaluation of the effect and presence of CS in an artificially heated HTIW material did not show increased toxicity in vitro or in vivo. The results of the different combinations of factors such as increased fragility of the fibers or microcrystals encrusted in the glass structure of the fiber and consequently biologically inaccessible may explain the lack of toxicological effects.

The IARC assessment provided in monograph 68 is not applicable since SCs are not biologically accessible in HTIW after use.

High concentrations of fibers and other dusts can be produced when products are mechanically disrupted after use during demolition operations. Therefore ECFIA recommends:

- Take measures to reduce dust emissions; and
- All personnel directly involved must wear appropriate respiratory equipment to reduce exposure and comply with local regulatory limits.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product