



SAFETY DATA SHEET

(EUROPEAN)

SDS Number: 451E Revision 3

According to (EC) No 1272/2008

Date of Issue: 6th June 2013

Date of Last Revision: 19th August 2015

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

1.1 Identification of the product

Trade Names: Silplate Mass 1500

Fiberfrax products contain **Refractory Ceramic Fibres (RCF)/Alumino-silicate wools (ASW) ((RCF/ASW))**.

Index Number 650-017-00-8 (CLP Annex VI)

CAS number: 142844-00-6

CAS Name: Refractories, fibres, aluminosilicate

Registration number: 01-2119458050-50-0000

1.2 Identified Use

Use of the products is restricted to "professional users" for application as thermal insulation at temperatures up to 1500°C. Silplate Mass is a thick, medium viscosity, ready-mixed coating developed to protect modules, castables and refractory bricks in high temperature environments. Products are not intended for direct sale to the general public

- **Tertiary Use:** Installation, removal (industrial and professional) / Maintenance and service life (industrial and professional) (refer to section 8)

1.3 Identification of the Manufacturer/Supplier

France

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1.4 Emergency contact number

Occupational Hygiene and CARE: Tel: + 44 (0) 1744 887603. Fax: + 44 (0) 1744 886173
E Mail: reachsds@unifrax.co.uk
Language: English

Opening hours: Only available during office hours

2. HAZARDS IDENTIFICATION

As supplied these products are wet and unlikely to liberate dust therefore do not present a risk related to inhalation. The Classification of RCF/ASW, as contained within the products, relates to the inhalation of fibrous dusts.

2.1 Classification of the substance/mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008

Under the CLP-Regulation (classification, labelling and packaging of substances and mixtures) RCF/ASW has been classified as a 1B carcinogen ("presumed to have carcinogenic potential for humans, classification is largely based on animal evidence").


2.1.2 Additional information:

The International Agency for Research on Cancer (IARC) reaffirmed that group 2B ("possibly carcinogenic to humans") remains the appropriate classification for RCF/ASW.

In accordance with 31st Adaptation to Technical Progress (ATP) of Directive 67/548/ECC as published 15th January 2009 the classification as "irritant" has been removed for all types of man made vitreous fibres (MMVFs).

The 1st Adaptation to Technical Progress (ATP) to Regulation (EC) No 1272/2008 entered into force on 25 September 2009. It transfers the 30th and 31st ATPs of Directive 67/548/EEC to the Regulation (EC) No 1272/2008.

2.2 Labelling elements

Component	Classification	Hazard pictogram & signal word	H& P Statement
Refractory ceramic fibres (Alumino-silicate wools)	(EC) No. 1272/2008	GHS 08 	H350i
		Danger	P202,P280

Signal Word

Danger

Hazard Statements

May cause cancer by inhalation (H350i)

Precautionary statements

Do not handle until all safety instructions have been read and understood. (P202)

Use personal protective equipment as required. (P280)

2.3 Other hazards:

Harmful if swallowed based on the freeze stabilizer, ethylene glycol, contained within the product;.

IRRITANT EFFECTS

Slight to moderate chemical irritation to skin, eyes and upper respiratory system may result from repeated contact with this product due to the alkalinity of the product.

Component	Classification	Product number	H Statement
Ethanediol	(EC) No. 1272/2008	Cas 107-21-1 EC 203-473-3	H302, H373
	Acute Tox. 4 (oral) STOT Rep. 2	Reach number 01-2119456816- 28xxxx	

3. COMPOSITION / INFORMATION OF INGREDIENTS

3.1 Composition

Chemical composition of Refractory Ceramic Fibres (RCF/ASW): SiO₂ 45-60% - Al₂O₃ 40-55%

COMPONENT	CAS NUMBER	Registration number	Index number in CLP Annex VI	% by weight
Refractory ceramic fibres (Alumino-silicate wools)	142 844 -00 -6	01-2119458050-50-0000	650-017-00-8	<40
Ethylene Glycol	107-21-1	01-2119456816-28	-	<5

Silplate Mass 1500 also contains 1-2% : Polycrystalline Wools (PCW)

CAS Number : 675106-317

CAS Name: basic aluminium chloride reaction products with silica

Registration number :01-2119456884-25-0003

**PCW can also be identified by a combination of CAS Numbers: 1344-28-1 (fibrous forms of Aluminium Oxide), 7631-86-9 (Silica, non-crystalline), or 1302-93-8 (Mullite).

3.2 Description

Silplate Mass is a thick, medium viscosity, ready-mixed coating developed to protect fibre modules, castables and refractory bricks in high temperature environments. Following application and drying, Silplate Mass provides a highly resistant surface to flame and/or abrasion by high velocity gases. These products are typically applied by trowel or spraying/gunning techniques. Large volumes may be poured before being finished using a trowel.

4. FIRST AID MEASURES

Skin

In case of skin irritation remove contaminated clothing immediately and rinse affected areas with water and wash gently. Do not rub or scratch exposed skin.

Eyes

In case of eye contact flush abundantly with water or up to 15 minutes; have eye bath available. Do not rub eyes. Seek medical attention if any discomfort continues

Ingestion

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Seek medical attention, as ingestion of large amounts of pure ethylene glycol may cause unconsciousness.

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

Non combustible products. Packaging and surrounding materials may be combustible. Class of reaction to fire is (A1) in accordance with DIN EN 13501-1.

Use extinguishing agent suitable for surrounding combustible materials

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide workers with appropriate protective equipment as detailed in section 8.

Restrict access to the area to a minimum number of workers required.
Restore the situation to normal as quickly as possible.

6.2 Environmental precautions

Prevent further dust dispersion of dried materials,
Do not flush spillage to drain.
Check for local regulations, which may apply.

6.3 Methods and materials for containment and clean up

For wet products use absorbent spill kit to contain spillage and shovel in to container
Use a vacuum cleaner fitted with a high efficiency filter (HEPA) for dried materials
Do not use compressed air for clean up.
Do not allow dried materials to be wind blown.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling of the wet product as supplied can be a source skin and eye irritation and therefore the processes should be designed to limit the amount of handling and avoid contact with the skin and eyes. Whenever possible, handling should be carried out under controlled, well ventilated conditions and always using correct PPE. Avoid spillage of the materials and inhalation of vapours.

Regular good housekeeping will minimise secondary exposure to any dried out materials.

7.2 Conditions for safe storage

Store in original packaging in dry area whilst awaiting use.
Always use sealed and visibly labelled containers.
Avoid damaging containers.

7.3 Specific end use

The main application of these products is as thermal insulation. Use of the products is restricted to "professional users". Please refer to section 8 and the relevant exposure scenario.

8. RISK MANAGEMENT MEASURES/EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control Parameters

As supplied this product is wet and would not present an inhalation hazard, the main issue would be contact with the skin and potentially ingesting the product through poor hygiene.

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. A qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for personal protective equipment.

8.1.1 National Limit Values

Examples of national OELs for RCF/ASW (relates to airborne fibrous dusts -December 2010) are given in the table below. Additional references and/or updates can **be found on the following websites:**

http://www.dguv.de/ifa/en/gestis/limit_values

<http://osha.europa.eu/en/publications/reports/548OELs/view>

COUNTRY	OEL *
Austria	0.5 f/ml
Belgium	0.5 f/ml
Czech Republic	0.3 f/ml
Denmark	1.0 f/ml
Finland	0.2 f/ml
France***	0.1 f/ml
Germany***	0.2 f/ml (max. tolerance-concentration)**
Italy	0.2 f/ml
Poland	0.5 f/ml
Spain	0.5 f/ml
Sweden	0.2 f/ml
The Netherlands	0.5 f/ml
UK***	1.0 f/ml

Note:

* 8-hr time weighted average concentrations of airborne respirable fibres measured using the conventional membrane filter method

** In Germany, OELs were replaced by concentration ranges following a risk based concept. The maximum "tolerance-concentration" is 0.2 f/ml following TRGS 558 in combination with TRGS 910.

*** Source of OEL is detailed in section 15

The Scientific Committee on Occupational Exposure Limit Values (**SCOEL**) as set up by a Commission Decision (95/320/EC) have proposed an OEL for RCF/ASW of 0.3 f/ml.

8.1.2 Recommended monitoring programmes

France has a monitoring programme in line with test method reference number XP X43-269 dated March 2002, which is used to check for compliance with the OEL of 0.1 f/ml.

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"

Germany recommends following the rules as laid out in TRGS 402 and describes applicable sampling / analytical methods in BGI 505-31 and BGI 505-46.

WHO-EURO method: Determination of airborne fibre number concentrations; A recommended method, by phase-contrast optical microscopy (membrane filter method); World Health Organisation Geneva 1997 ISBN 92 4 154496 1.

8.1.3 DNEL/DMEL

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 1.62 f/ml.

SCOEL have recommended an OEL 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 OEL of 0.3 f/ml. This is considerably lower than the calculated DNEL value.

8.2 Exposure Controls

8.2.1 Appropriate engineering controls

Review your application(s) and assess situations with the potential for skin contact, ingestion and inhalation of vapour, mist or dusts*. (* dust will only be a potential in after use situations where the coating has dried).

Provide adequate ventilation and local extraction where practical and appropriate.

Designate work areas and restrict access to informed and trained workers.

Use operating procedures that will limit exposure of workers.

Keep the workplace clean. Use a vacuum cleaner fitted with a HEPA filter; or wet scrubbing techniques avoid using dry sweeping and compressed air.

If necessary, consult an industrial hygienist to design workplace controls and practices.

8.2.2 Personal Protective Equipment

Skin Protection

Wear impervious gloves and work clothes, which are loose fitting at the neck and wrists. Each worker should be provided with two lockers in an appropriate changing and washing area. It is good hygiene practice to ensure work clothes are washed separately by the employer. Work clothes should not be taken home.

Eye Protection

When working with the wet product as supplied wear goggles or safety glasses with side shields as appropriate

Respiratory Protection

As supplied the product is wet and unlikely to liberate dust.

If the product has dried out and where dust concentrations are below the exposure limit value, RPE may be

used on a voluntary basis (FFP2/P2 respiratory protection would be appropriate)
 For short term operations where excursions are less than ten times the limit value, use FFP3/P3 respiratory protection.
 In case of higher concentrations or where the concentration is not known, please seek advice from your company and/or your supplier.
 You may also refer to the ECFIA code of practice available on the ECFIA's web site: www.ecfia.eu

Information and Training of workers

This should include:

The applications involving RCF/ASW-containing products;
 The potential risk to health resulting from the exposure to fibrous dust;
 The requirements regarding smoking, eating and drinking at the workplace;
 The requirements for protective equipment and clothing;
 The good working practices to limit dust release;
 The proper use of protective equipment.

8.2.3 Environmental Exposure Controls

RCF/ASW as contained with in this product is inorganic, inert and stable and it is not soluble in water (solubility <1mg/litre) and as such does not pose a detrimental effect on the environment.

Contain spillages to prevent access to drain.

Refer to local, national or European applicable environmental standards for release to air water and soil.
For waste, refer to section 13

9.1 Information on basic physical and chemical properties

APPEARANCE	Pink putty	PARTITION COEFFICIENT	Not applicable
BOILING POINT	Not applicable	ODOUR	None
FLASH POINT	Not applicable	MELTING POINT (Fibre)	> 1760° C
AUTOFLAMMABILITY	Not applicable	FLAMMABILITY	Not applicable
OXIDISING PROPERTIES	Not applicable	EXPLOSIVE PROPERTIES	Not applicable
SPECIFIC GRAVITY	Not applicable	VAPOUR PRESSURE	Not applicable
WET DENSITY	1500 Kg/m ³	pH	Not applicable

**LENGTH WEIGHTED GEOMETRIC MEAN DIAMETER OF FIBRES
 CONTAINED IN THE PRODUCT** 1.4 - 3 µm

10. STABILITY AND REACTIVITY

10.1 Reactivity

RCF/ASW is stable and non reactive.

10.2 Chemical stability

RCF/ASW is inorganic, stable and inert

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Please refer to handling and storage advice in Section 7

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

Upon heating above 900°C for sustained periods, this amorphous material can begin to transform to mixtures of crystalline phases. For further information please refer to Section 16.

The freeze stabiliser MEG in the product can liberate CO, CO₂ and aldehydes depending on temperature, pressure and other materials present.

In General:

Thermal decomposition of organic binders as a result of fires or from first heat of the product may release smoke, carbon monoxide and carbon dioxide. Use adequate ventilation or other precautions to eliminate exposure to vapours resulting from thermal decomposition of binder. Exposure to thermal decomposition fumes may cause respiratory tract irritation, bronchial hyper-reactivity or an asthmatic-type response.

11. TOXICOLOGICAL INFORMATION

Toxicology data as follows relates specifically to the RCF/ASW substance contained with in this mixture. RCF/ASW may only, be liberated as a dust in air, if the mixture has been dried and is then abraded/handled. As supplied, given this is a wet product, dust generation is unlikely:

11.1 Toxicokinetics, metabolism and distribution

11.1.1 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).

11.1.2 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 decrement in lung function associated with current exposures, but has indicated a reduction of lung capacity among smokers.

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.

11.2 Information on Toxicological effects

11.2 Information on Toxicological effects

Acute toxicity	: 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)
Carcinogenicity	: Classified as category 1B Method: Inhalation. Multi-dose Species: Rat, Dose: 3 mg/m ³ , 9 mg/m ³ and 16 mg/m ³ . Nose only inhalation Results: Fibrosis just reached significant levels at 16 and 9 mg/m ³ but not at 3 mg/m ³ . None of the parenchymal tumour incidences were higher than the historical control values for this strain of animal. Method: Inhalation. Single dose Species: Rat, Dose: 30 mg/m ³ . Nose only inhalation 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)
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)

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.

12. ECOLOGICAL INFORMATION

The RCF/ASW are inert materials that remain stable overtime.

RCF/ASWs are insoluble in the natural environment and are chemically identical to inorganic compounds found in the soil and sediment.

No adverse effects of RCF/ASW on the environment are anticipated.

Ecotoxicity of the Mono Ethylene Glycol (MEG):

The product components are not classified as environmentally hazardous.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l > 10 000 mg/l

EC 50, 48 Hrs, Daphnia, mg/l > 10 000 mg/l

IC 50, 72 Hrs, Algae, mg/l > 10 000 mg/l

12.2. Persistence and degradability

MEG is easily biodegradable.

12.3. Bio accumulative potential

MEG is not bio accumulating

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment

Waste containing > 0.1% RCF/ASW is categorised as a stable non-reactive hazardous waste, which can generally be disposed of at landfill sites licensed for this purpose

Unless wetted, such a waste is normally dusty and so should be properly sealed in clearly labelled containers for disposal. At some authorised disposal sites, dusty wastes may be treated differently in order to ensure they are dealt with promptly to avoid them being wind blown.

Please refer to the European list (Decision no 2000/532/CE as modified) to identify your appropriate European Waste Code (EWC) and ensure national and or regional regulation are complied with.

13.2 Additional information

When disposing of waste and assigning European Waste Code (EWC) any possible contamination during use will need to be considered and expert guidance sought as necessary.

14. TRANSPORT INFORMATION

Not classified as dangerous goods under relevant international transport regulations (ADR, RID, IATA, IMDG, ADN).

Ensure that dust is not wind blown during transportation.

Definitions:

ADR	Transport by road, Council Directive 94/55/EC
IMDG	Regulations relating to transport by sea
RID	Transport by rail, Council Directive 96/49/EC
ICAO/IATA	Regulations relating to transport by air
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

15. REGULATORY INFORMATION

15.1 Safety, health and environment regulations/legislation specific for the substances or mixtures

EU regulations:

- Regulation (EC) No 1907/2006 dated 18th December 2006 on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 dated 20th January 2009 on classification, labeling and packaging of substances and mixtures (OJ L 353)
- Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC (OJEC of 13 December 1997, L 343).
- Commission regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures.

Inclusion of RCF/ASW on the Candidate List of SVHC:

RCF are classified as a carcinogenic substance CLP 1B. On the 13th of January 2010 ECHA updated the Candidate List (containing substances of very high concern – SVHC – potentially qualifying for authorisation) and added 14 new substances in this list including aluminosilicate refractory ceramic fibres and zirconia aluminosilicate refractory ceramic fibres.

As a consequence, EU (European Union) or EEA (European Economical Area) suppliers of articles which contain aluminosilicate refractory ceramic fibres and zirconia aluminosilicate refractory ceramic fibres in a concentration above 0.1% (w/w) have to provide sufficient information, available to them, to their customers or upon requests to a consumer within 45 days of the receipt of the request. This information must ensure safe use of the article and as minimum contains the name of the substance.

Restriction on Marketing of RCF/ASW

Marketing and use of RCF/ASW is controlled by Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations as modified (21st amending, Directive 2001/41/EC, 19 June 2001) and is restricted to professional use only.

PROTECTION OF WORKERS

Shall be in accordance with several European Directives as amended and their implementations by the Member States:

- Council Directive 89/391/EEC dated 12 June 1989 “on the introduction of measures to encourage improvement in the safety and health of workers at work (OJEC (Official Journal of the European Community) L 183 of 29 June 1989, p.1).
- Council Directive 98/24/EC dated 7 April 1997 “on the protection of workers from the risks related to chemical agents at work” (OJEC L 131 of 5 May 1998, p.11).
- Council Directive 2004/37/EC of 29 April 2004 on the protection of workers from risks related to exposure to carcinogens mutagens and reprotoxics at work (OJEC L 158 of 30 April 2004).

VOC DIRECTIVE 2004/42/CE

Mono Ethylene Glycol (MEG) is a VOC according to paints Directive 2004/42/CE. MEG would meet the VOC requirements if having an initial boiling point less than or equal to 250°C at standard pressure of 101,3 kPa .

Other EU Regulations

Member states are in charge of implementing European directives into their own national regulation within a period of time normally given in the directive. Member States may impose more stringent requirements. Please always refer to national regulations.

Source of reference for the OELs:

UK: HSE EH40 Workplace Exposure Limit

France: Décret N°2007-1539 du 26 octobre 2007 fixant des valeurs limites d'exposition professionnelle contraignantes pour certains agents chimiques et modifiant le code du travail

Germany: Änderung und Ergänzung der Bekanntmachung TRGS 910 / TRGS 558 and TRGS 905

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for RCF/ASW

16. OTHER INFORMATION

USEFUL REFERENCES (the directives which are cited must be considered in their amended version)

- Hazards from the use of Refractory Ceramic Fibre. Health and Safety Executive: Information document, HSE 267 (1998).
- Working with High Temperature Insulation wools 2006;
- ECFIA; Code of Practice.
- Maxim LD et al (1998). CARE – A European programme for monitoring and reducing Refractory Ceramic Fibre dust at the workplace initial results; Gefahrstoffe – Reinhaltung der Luft, 58:3,97-103.
- Recognition and control of exposure to RCF, ECFIA, April 2009
- TRGS 619 – Technical Rules for Hazardous substances: Substitution Products for Aluminium silicate wools.

Additional information and precautions to be considered upon removal of after service material

In almost all applications RCF/ASW is used as an insulating material helping to maintain a temperature of 900°C or more in a closed space. As only a thin layer of the insulation (hot face side) is exposed to high temperatures, respirable dust generated during removal operations does not 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 devitrification allowing CS to build up does not occur. This is the case for waste mould casting for instance.

Toxicological evaluation of the effect of the presence of CS in artificially heated RCF/ASW material has not shown any increased toxicity *in vitro*. Combinations of factors such as increased brittleness of fibres, or microcrystals being embedded in the glass structure of the fibre and therefore not being biologically available may explain the lack of toxicological effects.

The IARC evaluation as provided in Monograph 68 is not relevant as CS is not biologically available in after-service RCF/ASW.

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:

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

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 RCF products from an industrial hygiene perspective in order to establish appropriate recommendations to reduce exposures.

If you wish to participate in the CARE programme, contact ECFIA or your supplier.

NOTE

The directives and subsequent regulations detailed in this Safety Data Sheet are only applicable to the European Union (EU) Countries and not to countries outside of the EU.

Websites

European Industry Association Representing HTIW (ECFIA): 3, Rue du Colonel Moll, 75017 Paris
Tel. +33 (0) 6 31 48 74 26
www.ecfia.eu

Revision Summary

Section 1	addition of identified uses, change of emergency contact number, addition of product identifiers
Section 2	reformatted according to Regulation (EC) No 1907/2006
Section 3	addition of classification according to (EC) No 1272/2008
Section 3	product description updates
Section 6	reformatted according to Regulation (EC) No 1907/2006
Section 8	reformatted according to Regulation (EC) No 1907/2006, addition of table of RMM's for identified uses, addition of information on environmental exposure controls
Section 9	reformatted according to Regulation (EC) No 1907/2006
Section 10	reformatted according to Regulation (EC) No 1907/2006
Section 11	reformatted according to Regulation (EC) No 1907/2006, addition of detailed information on studied toxic effects for RCF and MEG
Section 12	reformatted according to Regulation (EC) No 1907/2006
Section 13	reformatted according to Regulation (EC) No 1907/2006
Section 15	reformatted according to Regulation (EC) No 1907/2006

NOTICE:

The information presented herein is presented in good faith and believed to be accurate as of the effective date of this Safety Data Sheet. Employers may use this SDS to supplement other information gathered by them in their efforts to assure the health and safety of their employees and the proper use of the product. This summary of the relevant data reflects professional judgment; employers should note that information perceived to be less relevant has not been included in this SDS. Therefore, given the summary nature of this document, Unifrax I LLC does not extend any warranty (expressed or implied), assume any responsibility, or make any representation regarding the completeness of this information or its suitability for the purposes envisioned by the user.

