

Safety Data Sheet - Europe (EU)

Astro HS Compound

Revision 4 - 23rd February 2023



ASTROFLAME   **20Kg**
PASSIVE FIRE STOP SYSTEMS
ASTRO HS COMPOUND
BATCH NO. 20528
PRODUCED:

Product Description:
Astro HS (High-Strength) Compound is a Gypsum based mortar material used to reinstata the fire resistance performance of floor and wall constructions where apertures exist for the penetrations of multiple services. Astro HS Compound, once cured, has excellent load bearing capabilities and can be installed in large span openings. Astro HS Compound can be installed across a variety of services and substrates including: Rigid Floors, Rigid Walls, Multi-Service penetrations, Blank Openings, load of stairs.

Areas of Use:

- To reinstata fire resistance through walls and floors
- Multi-Service penetrations
- Loadbearing seals
- Large Span openings
- Prevention of air leakage
- Outstanding Acoustic performance
- Automated working for 25 years
- For internal use

Advantages:

- Large unsupported spans
- No shrinkage
- Easy to mix
- High strength and load bearing properties
- Versatile workability range
- Provides smoke seal.

Astroflame (Fire Seals) Ltd.
Stephenson Road, Unit 8,
The I.O Centre, Stephenson Road,
Segensworth, Fareham, PO15 5RU

Manufactured in the UK
Telephone: 01329 844500
Email: sales@astroflame.com
Web: www.astroflame.com



Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product form** : Mixture**Product Name** : Astro HS Compound**Type of product** : Adhesives, sealants**Product group** : Trade product**Product Code** : AFHSC**1.2. Relevant identified uses of the substance or mixture and uses advised against****Main use category** : Professional use**Industrial/Professional use spec** : For professional use only**Use of substance/Mixture** : Adhesives, sealants**1.2.2. Uses advised against**

No additional information available

1.3. Details of the supplier of the safety data sheet**Company Name** : Astroflame (Fireseals) LTD
Unit 8 , I.O Centre
Stephenson Road
Segensworth
Fareham
PO15 5RU
United Kingdom**EU Importer** : Hofstee Preventie Service V.O.F
Plesmanstraat 53
7903 BG Hoogeveen
Netherlands**Tel Number** : (0) 44 1329 844500**Tel Number** : 0031 59333 1776**Email** : sales@astroflame.com**Email** : info@hpsmail.nl**1.4. Emergency telephone number****Tel Number** : (0) 44 1329 844500 Language: English - Office hours 8am to 5:30pm GMT
0031 593331776 Language: Language: English/Dutch

Section 2: Hazards identification

2.1. Classification of the substance or 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]

Precautionary statements (CLP) :

- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P264 - Wash hands, forearms and face thoroughly after handling.
- P280 - Wear eye protection, protective clothing.

2.3. Other hazards

Other hazards which do not result in classification : Dust formation.

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH 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 %

Section 3: Composition/information on ingredients

3.1. Substances

Not applicable

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium sulfate	CAS-No.: 7778-18-9 EC-No.: 231-900-3	> 80	Not classified
Limestone	CAS-No.: 471-34-1 EC-No.: 207-439-9	< 30	Not classified

Section 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation** : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/attention.
- First-aid measures after skin contact** : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact** : Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion** : Rinse mouth out with water. Do not induce vomiting.

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

Treat symptomatically.

Section 5: Fire-Fighting measures

5.1. Extinguishing media

- Suitable extinguishing media** : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire** : The product is non-combustible.

5.3. Advice for fire-fighters

- Protection during firefighting** : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protective equipment (PPE).

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/ personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Avoid dust formation.

Other information : Dispose of in accordance with relevant local regulations.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/ personal protection".

Section 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Dust formation.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid dust formation.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Protect from moisture. Keep container closed when not in use.

7.3. Specific end use(s)

No additional information available

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Section 8: Control parameters/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Calcium sulfate (7778-18-9)

Belgium - Occupational Exposure Limits

Local name	Calcium (sulfate de) (anhydrate) # Calciumsulfaat (anhydraat)
OEL TWA	10 mg/m ³
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021

Czech Republic - Occupational Exposure Limits

Local name	Sádra
PEL (OEL TWA)	10 mg/m ³
Remark	Prachy s převážně nespecifickým účinkem.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)

Germany - Occupational Exposure Limits (TRGS 900)

AGW (OEL TWA) [1]	6 mg/m ³ (A)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)
Regulatory reference	TRGS900

Greece - Occupational Exposure Limits

Local name	Ασβέστιο θειικό
OEL TWA	10 mg/m ³
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους

Hungary - Occupational Exposure Limits

Local name	KALCIUM-SZULFÁT
AK (OEL TWA)	4 mg/m ³ 1.5 mg/m ³ respirábilis frakció
Regulatory	N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről

Ireland - Occupational Exposure Limits

Local name	Calcium sulphate
OEL TWA [1]	10 mg/m ³
Regulatory reference	Chemical Agents Code of Practice 2021

Latvia - Occupational Exposure Limits

Local name	Kalcija sulfāts (hidrogenēts; ģipša putekļi)
OEL TWA	4 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Poland - Occupational Exposure Limits	
Local name	Siarczan (VI) wapnia (gips)
NDS (OEL TWA)	10 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Obowiązuje jednoczesne oznaczanie stężeń frakcji respirabilnej krzemionki krystalicznej.
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Sulfato de cálcio
OEL TWA	10 mg/m ³ I (Fração inalável)
Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia - Occupational Exposure Limits	
Local name	Síran vápenatý (anhydrid)
NPHV (OEL TWA) [1]	4 mg/m ³ inhalovateľná frakcia 1.5 mg/m ³ respirabilná frakcia
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	kalcijev sulfat
OEL TWA	6 mg/m ³
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Sulfato de calcio anhidro
VLA-ED (OEL TWA) [1]	10 mg/m ³
Remark	e (Este valor es para la materia particulada que no contenga amianto y menos de un 1% de sílice cristalina).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³ 8 hr
WEL STEL (OEL STEL)	30 mg/m ³
Switzerland - Occupational Exposure Limits	
Local name	Sulfate de calcium / Calciumsulfat [Gips]
MAK (OEL TWA) [1]	3 mg/m ³ (a) / (a)
Critical toxicity	Formel / Formal
Notation	SS _c / SS _c
Regulatory reference	www.suva.ch, 28.03.2022
Limestone (471-34-1)	
Croatia - Occupational Exposure Limits	
Local name	Kalcijev karbonat
GVI (OEL TWA) [1]	4 mg/m ³ R (respirabilna prašina) 10 mg/m ³ U (ukupna prašina)
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

France - Occupational Exposure Limits	
Local name	Calcium (carbonate de) (Calcite) (Marbre)
VME (OEL TWA)	10 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 552)	
Concentration limits	6 mg/m ³
Ireland - Occupational Exposure Limits	
Local name	Calcium carbonate [Limestone, Marble]
OEL TWA [1]	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
Local name	Kalcija karbonāts
OEL TWA	6 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
Poland - Occupational Exposure Limits	
Local name	Węgiel wapnia
NDS (OEL TWA)	10 mg/m ³ frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
United Kingdom - Occupational Exposure Limits	
Local name	Calcium carbonate (Limestone, Marble)
WEL TWA (OEL TWA) [1]	10 mg/m ³ total inhalable 4 mg/m ³ respirable
WEL STEL (OEL STEL)	4 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Switzerland - Occupational Exposure Limits	
Local name	Carbonate de calcium / Calciumcarbonat
MAK (OEL TWA) [1]	3 mg/m ³ (a) / (a)
Remark	NIOSH
Regulatory reference	www.suva.ch, 28.03.2022
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m ³

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Dust production: dust mask with filter type P2. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Dust mask	Type P2		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: white to cream.
Appearance	: Powder.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: > 1000 °C
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
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 available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
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

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

Section 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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 toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Limestone (471-34-1)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
LC50 Inhalation - Rat	> 3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

Skin corrosion/irritation : Not classified

Limestone (471-34-1)	
pH	8.5 – 9.5

Serious eye damage/irritation : Not classified

Limestone (471-34-1)	
pH	8.5 – 9.5

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Limestone (471-34-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

Astro HS Compound	
Viscosity, kinematic	Not applicable

Limestone (471-34-1)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Based on available data, the classification criteria are not met

11.2.2. Other information

No additional information available

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.

Hazardous to the aquatic environment, short-term: (acute) : Not classified

Hazardous to the aquatic environment, short-term: (chronic) : Not classified

Not rapidly degradable

Limestone (471-34-1)	
LC50 - Fish [1]	> 10000
EC50 - Crustacea [1]	> 1000
EC50 72h - Algae [1]	> 200 mg/l

12.2. Persistence and Degradability

Astro HS Compound	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Astro HS Compound	
Bioaccumulative potential	Not established.

Limestone (471-34-1)	
Partition coefficient n-octanol/water (Log Pow)	< 1

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.4. Mobility in soil

No additional information available

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

Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	:	Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

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				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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

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

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

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.

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

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.

Explosives Precursors Regulation (2019/1148)

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.

Drug Precursors Regulation (273/2004)

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

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

15.1.2. National regulations

Germany

- Employment restrictions** : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
- Water hazard class (WGK)** : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).
- Hazardous Incident Ordinance (12. BImSchV)** : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

- ABM category** : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Switzerland

- Storage class (LK)** : NG - Non-hazardous

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Safety Data Sheet (SDS) CUSTOM 2020/878

As part of our policy of ongoing improvements, we reserve the right to modify, alter or change product specifications without giving notice. Product illustrations are representations only. All information contained in this document is provided for guidance only, and as ASTROFLAME (FIRE SEALS) LTD has no control over the specific application or installation methods of the products, or of the prevailing site conditions, no warranties expressed or implied are intended to be given as to the actual performance of the products mentioned or referred to, and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given of products mentioned or referred to herein.

The above information to the best of our knowledge is true and accurate and based upon current test data and is supplied for your guidance only. Customers should satisfy themselves to the suitability of the product based on the products limitation of applications and that the product is fit for purpose for their intended use and no guarantee is given or implied since the conditions of actual use are beyond our control. ASTROFLAME (FIRE SEALS) LTD, disclaim any liability for loss, damage or other expense arising from the use of information, data or products mentioned or referred to and reserve the right to change any details or specifications without notice. If you are in any doubt as to the suitability of this product for your intended application please contact our technical team on 01329 844500 or email sales@astroflame.com and we will contact you.