

In accordance with 453/2010 and 1272/2008. (All references to EU regulations and directives are abbreviated into only the numeric term). Issued 2014-08-08

SECTION 1: Identification of the Substance/ Mixture and of the Company Undertaking

1.1. Product identifier

Trade name iPASSIVE FR ASF

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

Identified uses Sealant used in passive fire protection

1.3 Details of the supplier of the material safety data sheet

Company iPASSIVE Fire, B:Hive Building,
Smales Farm, 74 Taharoto Rd,
Takapuna, Auckland 0622

Telephone +64 9 869 5150

E-mail info@passivefire.com

Website ipassivefire.com

1.4 Emergency telephone number

Acute cases: Call 09 869 5150, request poison information.

Upon eye contact

As a precaution, rinse the eye thoroughly with water; if symptoms occur, call a doctor/physician.

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician. Remove contaminated clothes.

Upon ingestion

First rinse the mouth thoroughly with a lot of water and SPIT OUT the water. Then drink at least 1/2 litre of water. Call a doctor/physician if symptoms persists.

4.2 Most important symptoms and effects, both acute and delayed

Information on symptoms are ambiguous or missing for this product.

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

Symptomatic treatment.

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

Classification in accordance with 1999/45/EC

This product is assessed and not classified as hazardous.

2.2. Label elements

Label information in accordance with 1272/2008

Hazard pictograms Not applicable

Signal words Not applicable

Hazard statements Not applicable

Label information in accordance with 1999/45/EC

C.f. section 16.

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: Composition / Information on Ingredients

3.2. Mixtures

The product contains no substances, nor concentration levels thereof, that require marking or that need to be declared.

SECTION 4: First Aid Measures

4.1. Description of first aid measures

Upon breathing in

Allow the injured person to rest in a warm place with fresh air, if symptoms persist seek medical attention.

SECTION 5: Fire-fighting Measures

5.1. Extinguishing media

Extinguish with materials intended for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning, and, in case of incomplete combustion, aldehydes and other toxic, harmful, irritant or environmentally harmful substances.

The product is not hazardous in the flammable sense.

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use suitable allergy-tested protective gloves when cleaning up.

Dust filter IIb (P2) may be required when cleaning up.

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

Do not inhale the product and avoid exposure to skin and eyes.

6.2. Environmental precautions

At amounts considered in this case, the product may be released into the natural environment without serious environmental consequences. Large emissions should however be reported to the emergency services and the Environment Agency.

6.3. Methods and material for containment and cleaning up

Carefully collect the material for combustion waste disposal, then wash the spillage area with water.

Avoid stirring the material up so that it aerates.

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

6.4. Reference to other sections

Not applicable.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Treat the substance as potentially harmful to health.

Do not eat, drink or smoke in premises where this product is stored.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and dry place (above freezing temperature and not greater than 30°C).

Handle in premises which have modern ventilation standards.

Store in a well-ventilated area, not above eye-level.

Store only in the original package.

7.3. Specific end uses

Not indicated.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control parameters

8.1.1. National limit values , United Kingdom

All ingredients (cf. Section 3) lack occupational exposure limit values

8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

Eye protection should be worn if there is any danger of direct exposure or splashing.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks. Very sensitive persons can use gloves labelled "Low Chemical resistant" or "Waterproof" or with the pictogram indicated here.

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

Dust filter IIb (P2) may be required.

For limitation of environmental exposure, see Section 12.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---|-------------------------------------|
| a. Appearance | Form: Paste |
| | Colour: As supplied |
| b. Odour | Characteristic |
| c. Odour threshold | Not applicable |
| d. pH | 8.5 to 9.5 |
| e. Melting point/freezing point | Not applicable |
| f. Initial boiling point and boiling range | Not applicable |
| g. Flash point | Not applicable |
| h. Evaporation rate | Not applicable |
| i. Flammability (solid, gas) | Not applicable |
| j. Upper/lower flammability or explosive limits | Not applicable |
| k. Vapour pressure | Not applicable |
| l. Vapour density | Not applicable |
| m. Relative density | 1.58 to 1.62 |
| n. Solubility | Uncured sealant is soluble in water |
| o. Partition coefficient: n-octanol/water | Not applicable |
| p. Auto-ignition temperature | Not applicable |
| q. Decomposition temperature | Not applicable |
| r. Viscosity | Not applicable |
| s. Explosive properties | Not applicable |
| t. Oxidising properties | Not applicable |

9.2. Other information

No data available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Not indicated.

10.5. Incompatible materials

Not indicated.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

General or unspecific toxicity

The product is not classified as toxic.

Acute effects

Not classified as an acutely toxic substance.

Harmfulness

The product is not classified as harmful to health.

Repeated dose toxicity

To the best of our knowledge, no chronic effects have been reported for this product.

Carcinogenicity

To the best of our knowledge, no carcinogenic effects have been reported for this product.

CMR effects

To the best of our knowledge, no mutagenic or otherwise genetic or reproductive toxic effects have been reported for this product.

Sensibilisation

Hypersensitive reactions cannot be ruled out for persons who are overtly sensitive.

Corrosive and irritating effects

The product is not corrosive. Minor irritation cannot be ruled out for persons who are prone/susceptible.

Synergism and antagonism

To the best of our knowledge, no synergistic effects have been reported for this product or any of its ingredients.

Effect on judgement and other psychological effects

To the best of our knowledge this product does not affect discernment if used in the manner intended.

Effect on human microflora

Effects on human micro flora have not been proven, or are negligible.

SECTION 12: Ecological Information

12.1. Toxicity

This product consists of easily degradable naturally occurring or nature identical substances, mainly obtained from renewable sources, whereby the global environmental load may be considered to be negligible. In the local environment minor ecological effects may occur in case of large discharge.

12.2. Persistence and degradability

The product degrades in the natural environment.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

No chemical safety report has been executed.

12.6. Other adverse effects

Not indicated.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Waste handling of the product

The product is not classified as hazardous waste.

Also take local regulations for dealing with waste into account.

Cf. also national waste regulations.

Recycling of the product

This product is not usually recycled.

Transportation of waste

Waste class J(O) - Does not have adverse effects on health or the environment.

SECTION 14: Transport Information

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this material safety data sheet.

14.1. UN number

Not classified as dangerous goods.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory Information

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

Not applicable.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other Information

16a. Indication of where changes have been made to the previous version of the material safety data sheet

Revisions of this document

Earlier versions

2015-06-30 Revisions of this document has, where not otherwise stated, been caused by changes in the regulations.

16b. Legend to abbreviations and acronyms used in the material safety data sheet

Explanations of the abbreviations in Section 14.

| | |
|------|--|
| ADR | European Agreement concerning the International Transport of Dangerous Goods by Road. |
| RID | Regulations concerning the International Transport of Dangerous Goods by Rail. |
| IMDG | International Maritime Dangerous Goods Code |
| ICAO | International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada). |
| IATA | The International Air Transport Association. |

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2017-05-29.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g.

IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Material Safety Data Sheet

1907/2006 Annex II (2015/830)

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

1272/2008

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.

EH40/2005

EH40/2005 Workplace exposure limits.

89/391

COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work.

1907/2006

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

16e. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

Other relevant information

Label information in accordance with 1999/45/EG

| | |
|---------------|----------------|
| Hazard symbol | Not applicable |
| R-phrases | Not applicable |
| S-phrases | Not applicable |