

Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

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

· 1.1 Product identifier

· Trade name: illbruck FM812

· MSDS code: A-I-FM812

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

No further relevant information available.

· Application of the substance / the mixture Sealant

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

tremco illbruck Productie B.V. Vlietskade 1032, 4241 WC Arkel

T: +31 (0) 183568000, F: +31 (0) 183568100

msds@tremco-illbruck.com

#### · Further information obtainable from:

tremco illbruck Ltd

Coupland Road, Hindley Green, Wigan, WN2 4HT

T: +44 (0) 1942251400, F: +44 (0) 1942251410

www.tremco-illbruck.co.uk, uk.info@tremco-illbruck.com

### · 1.4 Emergency telephone number:

During office hours tel.: +44 (0) 1942251400. At all other times please contact your national poisoning centre.

### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Danger
- · Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No P210

smoking.

Do not pierce or burn, even after use. P251

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 ℃/122 ℉.

(Contd. on page 2)



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 1)

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

# **SECTION 3: Composition/information on ingredients**

- · 3.2 Mixtures
- · Description: Active substance with propellant

· Dangerous components:		
EC number: 911-815-4 Reg.nr.: 01-2119486772-26-xxxx	tris(2-chloro-1-methylethyl)phosphate	20- <30%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-xxxx	isobutane Flam. Gas 1, H220; Press. Gas C, H280	5- <10%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-xxxx	propane Flam. Gas 1, H220; Press. Gas C, H280	5- <10%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37-xxxx	dimethyl ether Flam. Gas 1, H220; Press. Gas C, H280	5- <10%
CAS: 36483-57-5 EINECS: 253-057-0	2,2-dimethylpropan-1-ol, tribromo derivative Eye Irrit. 2, H319	1- <5%

<sup>·</sup> Additional information: For the wording of the listed risk phrases refer to section 16.

### **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General information: Take affected persons out of danger area and lay down.
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If symptoms persist consult doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

- · Information for doctor: No further relevant information available.
- · Hazards No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

GB



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 2)

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Carbon monoxide (CO)

Carbon dioxide

Nitrogen oxides (NOx)

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen cyanide (HCN)

- 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

#### **SECTION 6: Accidental release measures**

· 6.1 Personal precautions, protective equipment and emergency procedures

Not required.

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and explosion protection:

Do not spray onto a naked flame or any incandescent material.

Protect against electrostatic charges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50  $^{\circ}$ C, i.e. electric lights. Do not pierce or burn, even after use.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Store away from water.
- · Further information about storage conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

(Contd. on page 4)



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 3)

· 7.3 Specific end use(s) No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

### 115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

· Protection of hands:



Protective gloves

- · Material of gloves PE gloves
- · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Body protection: Protective work clothing

### **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Aerosol

**Colour:** According to product specification

Odour: Characteristic

(Contd. on page 5)



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

	(Contd. of page 4)
· Odour threshold:	Not determined.
· pH-value:	Not determined.
Melting point/Melting range:	Not applicable, as aerosol.
Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	-97 ℃
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	235 ℃
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.8 Vol %
Upper:	8.5 Vol %
· Vapour pressure at 20 ℃:	3000 hPa
· Density at 20 ℃:	1 g/cm³
Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC (EU)	237.7 g/l
VOC (EC)	23.80 %
· 9.2 Other information	No further relevant information available.

# **SECTION 10: Stability and reactivity**

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

GB



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 5)

### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity
- · LD/LC50 values relevant for classification:

### tris(2-chloro-1-methylethyl)phosphate

Oral LD50 632 mg/kg (rat)

- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

### · Aquatic toxicity:

### tris(2-chloro-1-methylethyl)phosphate

EC50/48 h 131 mg/L (daphnia magna)

LC50/96 h | 51 mg/L (pimephales promelas)

- 12.2 Persistence and degradability No further relevant information available.
- · Other information: The product is difficultly biodegradable.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

# **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)



Version number 4 Printing date 26.06.2015 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 6)

· European waste catalogue

16 05 05 gases in pressure containers other than those mentioned in 16 05 04

15 01 04 metallic packaging

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

### **SECTION 14: Transport information**

· 14.1 UN-Number

· ADR, IMDG, IATA UN1950

· 14.2 UN proper shipping name

· ADR 1950 AEROSOLS

· IMDG **AEROSOLS** ·IATA AEROSOLS, flammable

· 14.3 Transport hazard class(es)



· ADR

· Class 2 5F Gases.

 Label 2.1

· IMDG, IATA



· Class 2.1 · Label 2.1

· 14.4 Packing group

· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user Warning: Gases.

· Danger code (Kemler):

· EMS Number: F-D,S-U

· 14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ) 1L

(Contd. on page 8)



Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

	(Contd. of page 7)
· Excepted quantities (EQ) · Transport category	Code: E0 Not permitted as Excepted Quantity 2
· Tunnel restriction code	D
· Remarks:	- Special provisions: 190, 327, 344, 625 (3.3) - Special provisions for carriage: V14 (7.2.4); CV9, CV12 (7.5.11); S2 (8.5)
· IMDG	
<ul><li>Limited quantities (LQ)</li><li>Excepted quantities (EQ)</li></ul>	1L Code: E0 Not permitted as Excepted Quantity
· Remarks:	<ul> <li>Special provisions: 63, 190, 277, 327, 344, 959 (3.3)</li> <li>Stowage and segragation: Protected from sources of heat. For 1950 AEROSOLS with a maximum capacity of 1 litre: Category A. Segregation as for class 9 but "Separated from" class 1 except division 1.4.</li> </ul>
· IATA	Special provisional A145 A167 A902 (4.4)
· Remarks:	- Special provisions: A145, A167, A802 (4.4)
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

# **SECTION 15: Regulatory information**

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

"CLP" Regulation (EC) No 1272/2008 (OJ L 353, 31.12.2008, p.1).

"CHIP" SI 2009 No.716.

"REACH" Regulation (EC) No 1907/2006 (OJ L 396, 30.12.2006, p.1, with subsequent amendments). COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015

- National regulations:
- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57 Not applicable.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

(Contd. on page 9)

# illbruck

# Safety data sheet according to 1907/2006/EC, Article 31

Printing date 26.06.2015 Version number 4 Revision: 26.06.2015

Trade name: illbruck FM812

(Contd. of page 8)

### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Flam. Gas 1: Flammable gases, Hazard Category 1 Flam. Aerosol 1: Flammable aerosols, Hazard Category 1 Press. Gas C: Gases under pressure: Compressed gas

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

· \* Data compared to the previous version altered.

GB