ZETTEX

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

Printing date 05.10.2020 Revision: 05.10.2020

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

· 1.1 Product identifier

· **Trade name: Zettex Fire Foam**

· 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**
One-component fire retardant polyurethane foam - gun grade

· 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**
Zettex Europe BV
Plaza 20, 4782 SK Moerdijk
The Netherlands
+31(0)888-938839
info@zettex.nl
www.zettex.nl

· 1.4 Emergency telephone number:

· Zettex Europe BV 031 (0) 888 938 839 (Mon-Fri 09:00-17:00)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008**

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Carc. 2	H351	Suspected of causing cancer.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

· 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**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**
diphenylmethanediisocyanate,isomeres and homologues

· **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H332 Harmful if inhaled.

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H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P284 In case of inadequate ventilation wear respiratory protection (a protective mask with an appropriate gas filter - i.e. type A1 according to standard EN 14387).
P302+P352 IF ON SKIN: Wash with plenty of water/soap.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of container to in accordance with local/regional/national/international regulation.

· **Additional information:**
Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. 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.
Contains isocyanates. May produce an allergic reaction.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate,isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	40-50%
CAS: 115-10-6 EINECS: 204-065-8 Reg.nr.: 01-2119472128-37	dimethyl ether Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-10%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119486557-22	isobutane Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-10%
CAS: 86675-46-9 Reg.nr.: 01-2119972940-30	Halogenated polyetherpolyol Acute Tox. 4, H302	1-5%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486557-22	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	1-5%

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Reg.nr.: 01-2119486772-26	reaction mass of tris(2-chloropropyl) phosphate and tris(2-chloro-1-methylethyl) phosphate and phosphoric acid, bis(2-chloro-1-methylethyl) 2-chloropropyl ester and phosphoric acid, 2-chloro-1-methylethyl bis(2-chloropropyl) ester Acute Tox. 4, H302	15-25%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· 4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.
· 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
· **Suitable extinguishing agents:** Foam
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· 5.2 Special hazards arising from the substance or mixture
Carbon monoxide (CO)
Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)
· 5.3 Advice for firefighters
· **Protective equipment:** Mouth respiratory protective device.
· **Additional information**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
· 6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
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.

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· 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:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· 7.2 Conditions for safe storage, including any incompatibilities
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
Observe official regulations on storing packagings with pressurised containers.
· **Information about storage in one common storage facility:** Store away from oxidising agents.
· **Further information about storage conditions:**
Store in dry conditions.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
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.

· 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:**	
CAS: 9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO
CAS: 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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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· **Protection of hands:**

Protective gloves

Protective gloves according to EN 374
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break trough 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 EN 13688

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
· **Odour threshold:**	Not determined.
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Not applicable, as aerosol.
· **Flash point:**	Not applicable, as aerosol.
· **Flammability (solid, gas):**	Not applicable.
· **Ignition temperature:**	199 °C
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapour density**	Not determined.

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· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
VOC (EC)	16.9 %
· **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:**
Carbon monoxide
Nitrogen oxides (NOx)
Hydrogen cyanide (prussic acid)

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if inhaled.

· **LD/LC50 values relevant for classification:**		
CAS: 115-10-6 dimethyl ether		
Inhalative	LC50/4 h	308 mg/l (rat)
CAS: 86675-46-9 Halogenated polyetherpolyol		
Oral	LD50	917 mg/kg (rat)
reaction mass of tris(2-chloropropyl) phosphate and tris(2-chloro-1-methylethyl) phosphate and phosphoric acid, bis(2-chloro-1-methylethyl) 2-chloropropyl ester and phosphoric acid, 2-chloro-1-methylethyl bis(2-chloropropyl) ester		
Oral	LD50	3.6 mg/kg (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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· **Carcinogenicity**
Suspected of causing cancer.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure**
May cause respiratory irritation.
· **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **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.

· **European waste catalogue**	
08 05 01*	waste isocyanates
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances

· **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.
Flammable liquids.
· **Label** 2.1

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· **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.
· **EMS Number:**	F-D,S-U
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1l
· **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**
No further relevant information available.

· **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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Abbreviations and acronyms:**
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Acute Tox. 4: Acute toxicity - inhalation – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2