

Ramsauer GmbH & Co KG  
4822 Bad Goisern / H.

Date printed 08.08.2019, Revision 08.08.2019

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

### 1.1 Product identifier

**2K-FIX 840 PLUS**

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

#### 1.2.1 Relevant uses

For filling, fixing and insulating gaps and cavities.

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

<b>Company</b>	Ramsauer GmbH & Co KG Sarstein 17 4822 Bad Goisern / H. / AUSTRIA Phone +43(0)6135 8205-0 Fax +43(0)6135 8323 Homepage <a href="http://www.ramsauer.at">www.ramsauer.at</a> E-mail <a href="mailto:office@ramsauer.at">office@ramsauer.at</a>
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#### Address enquiries to

<b>Technical information</b>	<a href="mailto:office@ramsauer.at">office@ramsauer.at</a>
<b>Safety Data Sheet</b>	<a href="mailto:sdb@chemiebuero.de">sdb@chemiebuero.de</a>

### 1.4 Emergency telephone number

**Advisory body** +43 (0) 1 406 43 43 (24h)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.  
Carc. 2: H351 Suspected of causing cancer.  
Skin Sens. 1: H317 May cause an allergic skin reaction.  
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Eye Irrit. 2: H319 Causes serious eye irritation.  
Skin Irrit. 2: H315 Causes skin irritation.  
STOT SE 3: H335 May cause respiratory irritation.  
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation.  
Acute Tox. 4: H302 Harmful if swallowed.

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## 2.2 Label elements

### Hazard pictograms



### Signal word

DANGER

### Contains:

Diphenylmethanediisocyanate, isomeres and homologues

Tris(2-chloro-1-methylethyl) phosphate

Ethylene glycol

### Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H351 Suspected of causing cancer.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

H302 Harmful if swallowed.

### Precautionary statements

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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.

P260 Do not breathe vapours.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

P284 In case of inadequate ventilation wear respiratory protection.

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+P311 IF exposed or concerned: Call a POISON CENTER / doctor /...

P501 Dispose of contents/container in accordance with local/national regulation.

### Special labelling

EUH204 Contains isocyanates. May produce an allergic reaction.

## 2.3 Other hazards

### Environmental hazards

Does not contain any PBT or vPvB substances.

### Other hazards

Further hazards were not determined with the current level of knowledge.

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### SECTION 3: Composition / Information on ingredients

#### Product-type:

3.2 The product is a mixture.

Range [%]	Substance
5 - <20	Tris(2-chloro-1-methylethyl) phosphate CAS: 13674-84-5, EINECS/ELINCS: 237-158-7, Reg-No.: 01-2119486772-26-XXXX GHS/CLP: Acute Tox. 4: H302
10 - 15	Diphenylmethanediisocyanate, isomeres and homologues CAS: 9016-87-9, EINECS/ELINCS: Polymer GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373
5 - 15	Dimethyl ether CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX GHS/CLP: Flam. Gas 1: H220 - Press. Gas: H280
1 - 10	iso-Butane CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119485395-27-XXXX GHS/CLP: Flam. Gas 1: H220 - Press. Gas: H280
1 - <10	Ethylene glycol CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX GHS/CLP: Acute Tox. 4: H302 - STOT RE 2: H373
0 - 5	Propane CAS: 74-98-6, EINECS/ELINCS: 200-827-9, EU-INDEX: 601-003-00-5, Reg-No.: 01-2119486944-21-XXXX GHS/CLP: Flam. Gas 1: H220 - Press. Gas: H280

#### Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.  
For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

Take off contaminated clothing and wash before reuse.

##### Inhalation

Remove the victim into fresh air and keep him calm.  
In the event of symptoms seek medical treatment.

##### Skin contact

In case of contact with skin wash off immediately with soap and water.  
Consult a doctor if skin irritation persists.

##### Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

##### Ingestion

Seek medical advice immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

Headache  
Drowsiness  
Vertigo  
Allergic reactions

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

Treat symptomatically.

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## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** Carbon dioxide.  
Water spray jet.  
Dry powder.  
Foam.

**Extinguishing media that must not be used** Full water jet.

### 5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.  
Hydrogen chloride (HCl).  
Hydrogen cyanide (HCN).  
Nitrogen oxides (NOx).  
Bursting aerosols can be forcibly projected from a fire.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.  
Do not inhale explosion and/or combustion gases.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.  
Cool containers at risk with water spray jet.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.  
Ensure adequate ventilation.  
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.  
Take up residues with absorbent material (e.g. sand).  
Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.  
Keep away from all sources of ignition - Refrain from smoking.  
Propellant can form an explosive mixture with air.  
Do not eat, drink, smoke or take drugs at work.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
Use barrier skin cream.  
Take off contaminated clothing and wash before reuse.

### 7.2 Conditions for safe storage, including any incompatibilities

Prevent penetration into the ground.  
Do not store together with oxidizing agents.  
Do not store together with food and animal food/diet.  
Keep container in a well-ventilated place.  
Keep in a cool place, heat causes increase in pressure and risk of bursting.

**7.3 Specific end use(s)**

See product use, SECTION 1.2

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## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (GB)

Substance
Dimethyl ether
CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX
Long-term exposure: 400 ppm, 766 mg/m <sup>3</sup>
Short-term exposure (15-minute): 500 ppm, 958 mg/m <sup>3</sup>
Diphenylmethanediisocyanate, isomeres and homologues
CAS: 9016-87-9, EINECS/ELINCS: Polymer
Long-term exposure: 0,02 mg/m <sup>3</sup> , as NCO, Sen
Short-term exposure (15-minute): 0,07 mg/m <sup>3</sup>
iso-Butane
CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119485395-27-XXXX
Long-term exposure: 600 ppm, 1450 mg/m <sup>3</sup> , (Butane)
Short-term exposure (15-minute): 750 ppm, 1810 mg/m <sup>3</sup>
Ethylene glycol
CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX
Long-term exposure: 20 ppm, 52 mg/m <sup>3</sup> , Vapour, particulate: 10 mg/m <sup>3</sup>
Short-term exposure (15-minute): 40 ppm, 104 mg/m <sup>3</sup>

#### Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Dimethyl ether
CAS: 115-10-6, EINECS/ELINCS: 204-065-8, EU-INDEX: 603-019-00-8, Reg-No.: 01-2119472128-37-XXXX
Eight hours: 1000 ppm, 1920 mg/m <sup>3</sup>
Ethylene glycol
CAS: 107-21-1, EINECS/ELINCS: 203-473-3, EU-INDEX: 603-027-00-1, Reg-No.: 01-2119456816-28-XXXX
Eight hours: 20 ppm, 52 mg/m <sup>3</sup> , H
Short-term (15-minute): 40 ppm, 104 mg/m <sup>3</sup>

#### DNEL

Substance
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
Industrial, dermal, Long-term - systemic effects: 2,08 mg/kg bw/day.
Industrial, inhalative, Long-term - systemic effects: 5,82 mg/m <sup>3</sup> .
Industrial, inhalative, Acute - systemic effects: 5,82 mg/m <sup>3</sup> .
Industrial, dermal, Acute - systemic effects: 2,08 mg/kg bw/day.
general population, inhalative, Acute - systemic effects: 1,46 mg/m <sup>3</sup> .
general population, inhalative, Long-term - systemic effects: 1,46 mg/m <sup>3</sup> .
general population, dermal, Long-term - systemic effects: 1,04 mg/kg bw/day.
general population, oral, Acute - systemic effects: 0,52 mg/kg bw/day.
general population, dermal, Acute - systemic effects: 1,04 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 0,52 mg/kg bw/day.
Ethylene glycol, CAS: 107-21-1
Industrial, inhalative, Long-term - local effects: 35 mg/m <sup>3</sup> .
Industrial, dermal, Long-term - systemic effects: 106 mg/m <sup>3</sup> .
general population, dermal, Long-term - systemic effects: 53 mg/m <sup>3</sup> .

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general population, inhalative, Long-term - local effects: 7 mg/m<sup>3</sup>.

Dimethyl ether, CAS: 115-10-6

Industrial, inhalative, Long-term - systemic effects: 1894 mg/m<sup>3</sup>.

general population, inhalative, Long-term - systemic effects: 471 mg/m<sup>3</sup>.

#### PNEC

Substance

Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5

soil, 1,7 mg/kg.

freshwater, 0,64 mg/L.

seawater, 0,064 mg/L.

sewage treatment plants (STP), 7,84 mg/L.

sediment (freshwater), 2,92 mg/kg sediment dw.

sediment (seawater), 0,29 mg/kg sediment dw.

Ethylene glycol, CAS: 107-21-1

soil, 1,53 mg/kg.

sewage treatment plants (STP), 199,5 mg/l (AF=10).

sediment (seawater), 3,7 mg/kg.

sediment (freshwater), 37 mg/kg.

seawater, 1 mg/L.

freshwater, 10 mg/L.

Dimethyl ether, CAS: 115-10-6

sediment (seawater), 69 µg/L.

freshwater, 155 µg/L.

seawater, 16 µg/L.

sewage treatment plants (STP), 160 mg/l.

soil, 45 µg/kg.

sediment, 681 µg/kg.

## 8.2 Exposure controls

**Additional advice on system design** Ensure adequate ventilation on workstation.  
Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.

**Eye protection** Safety glasses. (EN 166:2001)

**Hand protection** 0,7 mm Nitrile rubber, >480 min (EN 374-1/-2/-3).  
The details concerned are recommendations. Please contact the glove supplier for further information.

**Skin protection** Protective clothing (EN 340)

**Other** Avoid contact with eyes and skin.  
Do not inhale vapours.  
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

**Respiratory protection** In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.  
Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)

**Thermal hazards** none

**Delimitation and monitoring of the environmental exposition** Protect the environment by applying appropriate control measures to prevent or limit emissions.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	aerosol
Color	not determined
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	1,02 (20 °C / 68,0 °F)
Bulk density [kg/m <sup>3</sup> ]	not applicable
Solubility in water	reacts with water
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

In case of proper use the intended polymerisationsreaction takes place.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Because of the high vapour pressure, containers are liable to burst if temperature rises > 50°C / 122°F.  
Formation of explosive gas/air mixtures.

### 10.4 Conditions to avoid

See SECTION 7.2.

### 10.5 Incompatible materials

Oxidizing agent

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product
ATE-mix, inhalativ (mist), > 5 mg/L 4h.
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, 1900 - < 2000 mg/kg.
Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LD50, dermal, Rabbit: > 9400 mg/kg (OECD 402).
LD50, oral, Rat: > 10000 mg/kg (OECD 401).
LC50, inhalativ (mist), Rat: 0,31 mg/l/4h (OECD 403).
NOAEL, inhalative, Rat: 0,2 mg/m <sup>3</sup> (OECD 453).
LOAEL, inhalative, Rat: 1 mg/m <sup>3</sup> (OECD 453).
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
LD50, oral, Rat: > 500 -2000 mg/kg.
LD50, dermal, Rat: > 2000 mg/kg.
LC0, inhalative, Rat: > 7 mg/l 4h.
iso-Butane, CAS: 75-28-5
LC50, inhalative, mouse: 1237 mg/l (2h) (Lit.).
Propane, CAS: 74-98-6
LC50, inhalative, Rat: > 1443 mg/l (15 min) (Lit.).
Ethylene glycol, CAS: 107-21-1
LD50, dermal, mouse: > 3500 mg/kg.
LD50, oral, Rat: 7712 mg/kg.
LC50, inhalative, Rat: > 2,5 mg/l 6h.
LDLo, oral, Human: ca. 1600 mg/kg.
Dimethyl ether, CAS: 115-10-6
LC50, inhalative, Rat: 164000 ppm (4 h).

#### Serious eye damage/irritation

Irritant  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

#### Skin corrosion/irritation

Irritant  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

#### Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

#### Specific target organ toxicity — single exposure

May cause respiratory irritation.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Classification was carried out based on substance-specific concentration limits.

#### Specific target organ toxicity — repeated exposure

May cause damage to organs through prolonged or repeated exposure through inhalation.  
Based on the available information, the classification criteria are fulfilled.  
Toxicological data of complete product are not available.  
Calculation method

#### Mutagenicity

Does not contain a relevant substance that meets the classification criteria.  
Based on the available information, the classification criteria are not fulfilled.  
Toxicological data of complete product are not available.

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<b>Reproduction toxicity</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
<b>Carcinogenicity</b>	Suspected of causing cancer. Based on the available information, the classification criteria are fulfilled. Toxicological data of complete product are not available. Calculation method
<b>Aspiration hazard</b>	Does not contain a relevant substance that meets the classification criteria. Based on the available information, the classification criteria are not fulfilled.
<b>General remarks</b>	

The determination of properties hazardous to health does not take the propellant or carrier material into account.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9
LC50, (96h), Danio rerio: > 1000 mg/l (OECD 203).
EC50, (24h), Daphnia magna: > 1000 mg/l (OECD 202).
EC50, (3h), Bacteria: > 100 mg/l (OECD 209).
NOEC, (21d), Daphnia magna: > 10 mg/l (OECD 202).
ErC50, (72h), Scenedesmus subspicatus: > 1640 mg/l (OECD 201).
Tris(2-chloro-1-methylethyl) phosphate, CAS: 13674-84-5
LC50, (96h), Pimephales promelas: 51 mg/l.
EC50, (3h), Bacteria: 784 mg/l.
EC50, (48h), Daphnia magna: 131 mg/l.
IC50, (72h), Algae: 82 mg/l.
Ethylene glycol, CAS: 107-21-1
LC50, (96h), Pimephales promelas: 72 860 mg/l.
EC50, (96h), Selenastrum capricornutum: 6500 - 13000 mg/l.
EC50, (48h), Daphnia magna: > 100 mg/l OECD 202.
Dimethyl ether, CAS: 115-10-6
LC50, (96h), fish: 4100 mg/L.
EC50, (72h), Algae: 155 mg/L.
EC50, (48h), Crustacea: 4400 mg/L.
NOEC, (96h), fish: 4100 mg/L.
NOEC, (48h), Crustacea: 4400 mg/L.

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	not determined
<b>Behaviour in sewage plant</b>	not determined
<b>Biological degradability</b>	not determined

### 12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

### 12.4 Mobility in soil

Released product polymerize immediately without penetrating into the ground.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

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## 12.6 Other adverse effects

None known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

Dispose of as hazardous waste.

#### Waste no. (recommended)

160504\* gases in pressure containers (including halons) containing dangerous substances  
080501\*

#### Contaminated packaging

Uncontaminated packaging may be taken for recycling.

#### Waste no. (recommended)

150110\*  
150104

## SECTION 14: Transport information

### 14.1 UN number

Transport by land according to ADR/RID 1950

Inland navigation (ADN) 1950

Marine transport in accordance with IMDG 1950

Air transport in accordance with IATA 1950


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#### 14.2 UN proper shipping name

Transport by land according to ADR/RID Aerosols  
- Classification Code 5F  
- Label   
- ADR LQ 1 I  
- ADR 1.1.3.6 (8.6) Transport category (tunnel restriction code) 2 (D)

Inland navigation (ADN) Aerosols  
- Classification Code 5F  
- Label 

Marine transport in accordance with IMDG Aerosols  
- EMS F-D, S-U  
- Label   
- IMDG LQ 1 I

Air transport in accordance with IATA Aerosols, flammable  
- Label 

#### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID 2

Inland navigation (ADN) 2

Marine transport in accordance with IMDG 2.1

Air transport in accordance with IATA 2.1

#### 14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 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

**EEC-REGULATIONS** 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

**TRANSPORT-REGULATIONS** ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

**NATIONAL REGULATIONS (GB):** EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- **Observe employment restrictions for people** Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- **VOC (2010/75/CE)** 17 - 19 %

#### 15.2 Chemical safety assessment

not applicable

### SECTION 16: Other information

#### 16.1 Hazard statements (SECTION 03)

H373 May cause damage to organs through prolonged or repeated exposure through inhalation.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H315 Causes skin irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H280 Contains gas under pressure; may explode if heated.

H220 Extremely flammable gas.

H302 Harmful if swallowed.

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**16.2 Abbreviations and acronyms:**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 ATE = acute toxicity estimate  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 ELINCS = European List of Notified Chemical Substances  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 LC0 = lethal concentration, 0%  
 LOAEL = lowest-observed-adverse-effect level  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 NOAEL = No Observed Adverse Effect Level  
 NOEC = No Observed Effect Concentration  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 STP = Sewage Treatment Plant  
 TLV@/TWA = Threshold limit value – time-weighted average  
 TLV@STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

**16.3 Other information****Classification procedure**

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229  
 Pressurised container: May burst if heated. (Calculation method)  
 Carc. 2: H351 Suspected of causing cancer. (Calculation method)  
 Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)  
 Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Calculation method)  
 Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)  
 Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)  
 STOT SE 3: H335 May cause respiratory irritation. (Calculation method)  
 STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure through inhalation. (Calculation method)  
 Acute Tox. 4: H302 Harmful if swallowed. (Calculation method)

**Modified position**

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

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