

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

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

**1.1 Product identifier**

**Trade name:** INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414

**UFI:** 6VH7-5XU5-WU1H-M8KC

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

**Application of the substance / mixture** Polyurethane-sealant

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

**Manufacturer/Supplier:**

WS INSEBO GmbH

Industriestraße 24, A-2325 Himberg bei Wien

Tel.: +43 (0) 2235/86227-0

e-mail: office@insebo.com

**1.4 Emergency telephone number** Call local emergency information.

**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.
Lact.	H362	May cause harm to breast-fed children.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.

**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 GHS09

**Signal word** Danger

**Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues

alkanes, C14-17, chloro

**Hazard statements**

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

H332 Harmful if inhaled.

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

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.
H362	May cause harm to breast-fed children.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

**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.
P261	Avoid breathing vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P314	Get medical advice/attention if you feel unwell.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container at a hazardous or special waste collection point.

**Additional information:** As from 24 August 2023 adequate training is required before industrial or professional use.

**2.3 Other hazards**

Pressurised container: Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Formation of explosive mixtures possible without sufficient ventilation.

Persons with high respiratory sensitivity (e.g. asthma, chronic bronchitis) must not come into contact with the product.

Respiratory symptoms in case of overexposure may still occur after several hours. Dust, vapours and aerosols are particularly harmful to the respiratory tract.

**Results of PBT and vPvB assessment**

This mixture does not meet the PBT- or vPvB-criteria according to Regulation (EC) No 1907/2006.

**Determination of endocrine-disrupting properties**

The product contains no components considered to have endocrine disrupting properties according to REACH Article 57(f), Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 3: Composition/information on ingredients****3.2 Mixture**

**Description:** Prepolymer (mixed polyol and polymeric isocyanate) with freon-free low-boiling propellant

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**
**Dangerous components:**

CAS: 9016-87-9 EC number: 618-498-9	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, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 %	30 - 60%
CAS: 85535-85-9 EINECS: 287-477-0 Index number: 602-095-00-X Reg.No.: 01-2119519269-33	alkanes, C14-17, chloro Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Lact., H362, EUH066 PBT; vPvB	25 - 35%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0	isobutane (< 0.1% butadiene) Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5 - 15%
CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.No.: 01-2119472128-37	dimethyl ether Flam. Gas 1A, H220; Press. Gas (Comp.), H280	5 - 10%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	1 - 5%
EC number: 904-153-2 Reg.No.: 01-2119488034-38	reaction mass of 2-ethylpropane-1,3-diol and 5-ethyl-1,3-dioxane-5-methanol and propylidyntrimethanol Repr. 2, H361fd; Eye Irrit. 2, H319	<3%

**SVHC**

CAS: 85535-85-9 | alkanes, C14-17, chloro

**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:**

In case of accident or if you feel unwell, seek medical advice (show the label where possible).

In case of unconsciousness place patient stably in side position for transportation.

Personal protection for the first-aider

**After inhalation:** Supply fresh air, keep warm and at rest. If symptoms persist seek medical advice.

**After skin contact:**

Remove contaminated clothes. Rinse skin thoroughly with water and soap. In case of irritation seek medical treatment.

**After eye contact:**

Remove contact lenses, if present and easy to do. Rinse opened eyes for at least 15 minutes with plenty of water. If irritation persists seek medical advice.

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414****After swallowing:**

Not anticipated as this is an aerosol spray.

Keep affected person warm and at rest.

Seek immediate medical advice in case of complaints.

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

In case of inhalation irritation of mucous membranes of the airways can occur in sensitive people.

Local skin irritation (redness, itchiness). Degreases and dries skin.

Local eye conjunctiva irritation (redness, burning eyes, eye watering)

May cause irritation to the gastrointestinal tract accompanied by abdominal pain and nausea, even vomiting and diarrhoea can occur.

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

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing media:** CO<sub>2</sub>, extinguishing powder, sand, soil

**Unsuitable extinguishing media:** Water

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

Product contains highly flammable vapours and liquids. Formation of smoke in case of fire; carbon oxides, soot, hydrocarbons and aldehydes can be released due to incomplete combustion and thermolysis.

Risk of bursting due to heat. Formation of explosive air/vapour mixtures are possible. Vapors are heavier than air. By distribution at ground level flash back to distant ignition sources is possible.

**5.3 Advice for firefighters****Protective equipment:**

In case of fire wear self-contained respiratory equipment and full protective suit.

Do not inhale explosion gases or combustion gases.

**Additional information**

Evacuate area. Remove receptacles from the endangered area, ensuring one's own safety whilst doing so.

Cool containers in the vicinity with water spray. Contain runoff to prevent entry into water or drainage systems.

Dispose of fire debris and contaminated firefighting water according to the regulations.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Please notice instructions for person-related safety precautions, wear protective equipment (see 8.)

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

Keep unprotected persons away. Ensure adequate ventilation.

Keep away from ignition sources.

**6.2 Environmental precautions:**

Do not allow to enter sewers, surface or ground water.

Advise water authority in case of seepage into water course, sewage system or soil.

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

Cover with sand or damp soil.

Allow to solidify and remove mechanically.

Remove residues using PU foam cleaner.

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

Dispose contaminated material as waste according to section 13.

**Additional information:** Material automatically cures when exposed to air.

**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**

While handling pay attention to the usual precaution for chemicals. Comply with instructions for use.

Avoid any contact with skin, eyes and clothes.

Do not breathe gas/vapours/spray.

Provide good ventilation/exhaustion at the workplace.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and at the end of work.

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights.

Do not pierce or burn, even after use.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Do not spray on an open flame or glowing objects.

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

**Requirements to be met by storerooms and receptacles:**

Store in tightly closed original packaging in a well-ventilated, cool and dry place.

Avoid direct sun exposure and heat.

Storage regulations for pressurized gas receptacles must be observed.

**Information about storage in one common storage facility:**

Do not store food, beverages and animal feeding stuff in the storage area.

**Further information about storage conditions:**

Keep out of the reach of children and domestic animals.

Store containers upright.

**7.3 Specific end use(s) Sealant**

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

**8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

MAK (Austria)	Short-term value: 0.1 mg/m <sup>3</sup> , 0.01 ppm; Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Group entry diphenylmethane diisocyanate
AGW (Germany)	Long-term value: 0.05 E mg/m <sup>3</sup> ; 1;=2=(I);DFG, H, Sah, Y, 12

**CAS: 85535-85-9 alkanes, C14-17, chloro**

MAK (Austria)	Long-term value: 0.5 E mg/m <sup>3</sup>
---------------	--

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

TRK (Austria)	L, siehe Anhang III B
AGW (Germany)	Long-term value: 6 E mg/m <sup>3</sup> , 0.3 E ppm; 8(II);H, Y, 11, AGS
<b>CAS: 75-28-5 isobutane (&lt; 0.1% butadiene)</b>	
MAK (Austria)	Short-term value: 3800 mg/m <sup>3</sup> , 1600 ppm; Long-term value: 1900 mg/m <sup>3</sup> , 800 ppm
AGW (Germany)	Long-term value: 2400 mg/m <sup>3</sup> , 1000 ppm; 4(II);DFG
<b>CAS: 115-10-6 dimethyl ether</b>	
IOELV (EU)	Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm
MAK (Austria)	Short-term value: 3820 mg/m <sup>3</sup> , 2000 ppm; Long-term value: 1910 mg/m <sup>3</sup> , 1000 ppm
AGW (Germany)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm; 8(II);DFG, EU
<b>CAS: 74-98-6 propane</b>	
MAK (Austria)	Short-term value: 3600 mg/m <sup>3</sup> , 2000 ppm; Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm
AGW (Germany)	Long-term value: 1800 mg/m <sup>3</sup> , 1000 ppm; 4(II);DFG

**Regulatory information**

IOELV (EU): (EU) 2019/1831

MAK, TRK (Austria): GKV 2021, 330. Verordnung, 02.12.2024, Teil 2

AGW (Germany): TRGS 900

**DNELs:**

Methylenediphenyl diisocyanate (CAS 101-68-8):

 worker, long-term exposure - local and systemic effects, inhalation 0.05 mg/m<sup>3</sup>

 worker, short-term exposure - local and systemic effects, inhalation 0.1 mg/m<sup>3</sup>

 consumer, long-term exposure - local and systemic effects, inhalation 0.025 mg/m<sup>3</sup>

 consumer, short-term exposure - local and systemic effects, inhalation 0.05 mg/m<sup>3</sup>

Alkanes, C14-17, chloro (CAS 85535-85-9):

 worker, long-term exposure - systemic effects, inhalation 6.7 mg/m<sup>3</sup>

worker, long-term exposure - systemic effects, dermal 47.9 mg/kg bw/day

consumer, long-term exposure - local effects, oral 0.58 mg/kg bw/day

 consumer, long-term exposure - systemic effects, inhalation 2 mg/m<sup>3</sup>

consumer, long-term exposure - systemic effects, dermal 28.75 mg/kg bw/day

reaction mass of 2-ethylpropane-1,3-diol and 5-ethyl-1,3-dioxane-5-methanol and propylidynetrimethanol (CAS 904-153-2):

 worker, long-term exposure - systemic effects, inhalation 14.6 mg/m<sup>3</sup>

worker, long-term exposure - systemic effects, dermal 4.2 mg/kg bw/day

 consumer, long-term exposure - systemic effects, inhalation 4.4 mg/m<sup>3</sup>

consumer, long-term exposure - systemic effects, dermal 2.5 mg/kg bw/day

consumer, long-term exposure - systemic effects, oral 2.5 mg/kg bw/day

**PNECs:**

Methylenediphenyl diisocyanate (CAS 101-68-8):

freshwater 3.7 µg/l, marine water 0.37 µg/l

freshwater (intermittent releases) 37 µg/l

sediment freshwater 11.7 mg/kg, marine water 1.17 mg/kg

soil 2.33 mg/kg

Alkanes, C14-17, chloro (CAS 85535-85-9):

freshwater 1 µg/l, marine water 0.2 µ/l

sediment freshwater 13 mg/kg, marine water 2.6 mg/kg

STP 80 mg/l, soil 11.9 mg/kg, secondary poisoning 10 mg/kg

Reaction mass of 2-ethylpropane-1,3-diol and 5-ethyl-1,3-dioxane-5-methanol and propylidynetrimethanol (CAS

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

904-153-2):

freshwater 6.2 mg/l, marine water 0.62 mg/l

freshwater (intermittent releases) 7.43 mg/l

sediment freshwater 30.48 mg/kg, marine water 3.048 mg/kg

STP 100 mg/l, soil 2.45 mg/kg

**8.2 Exposure controls**

**Appropriate engineering controls** Provide good ventilation or exhaust at work.

**Individual protection measures, such as personal protective equipment**

**General protective and hygienic measures:**

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace.

Avoid inhalation and contact with skin and eyes.

Remove contaminated clothing immediately and wash carefully before reuse.

Be sure to clean skin thoroughly after work and before breaks.

Pregnant women should strictly avoid inhalation or skin contact.

**Respiratory protection**

Use protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) in case of insufficient ventilation.

**Hand protection**



Chemical resistant gloves (EN 374)

Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

**Material of gloves**

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Butyl rubber (thickness  $\geq 0.5$  mm), fluorinated elastomer (thickness  $\geq 0.4$  mm), chlorinated polyethylene, ethylene vinyl alcohol (EVOH), neoprene (thickness  $\geq 0.5$  mm), nitrile/butadiene rubber (NBR, thickness  $\geq 0.35$  mm), polyvinyl chloride (PVC)

Rate of permeability:  $\geq 480$  minutes

**Penetration time of glove material**

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

**Eye/face protection**



Safety glasses (EN 166)

**Body protection**

Protective work clothing

Protective clothing should be professionally laundered regularly.

**Environmental exposure controls**

Do not allow to enter sewers or surface water. Advise water authority if spillage has entered water course or drainage system.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Form:** Aerosol

**Colour:** According to product specification

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

<b>Odour:</b>	Not determined
<b>Melting point/freezing point:</b>	< 0 °C (pMDI, ISO 3016)
<b>Boiling point or initial boiling point and boiling range:</b>	Not determined.
<b>Flammability:</b>	Extremely flammable.
<b>Lower and upper explosion limit:</b>	No data available.
<b>Flash point:</b>	> 200 °C (MDI, DIN 53171) -80 °C (propellant)
<b>Auto-ignition temperature:</b>	> 500 °C (MDI, DIN 51794) > 350 °C (propellant)
<b>Decomposition temperature:</b>	No data available.
<b>pH:</b>	No data available
<b>Viscosity</b> <b>dynamic:</b>	≥ 200 mPas (MDI, DIN 53019, 20 °C)
<b>Solubility</b> <b>water:</b>	Insoluble; reacts with water
<b>organic solvents:</b>	Soluble before curing
<b>Partition coefficient, n-octanol/water:</b>	No data available.
<b>Vapour pressure:</b>	No data available.
<b>Density at 20 °C:</b>	1.2 g/cm <sup>3</sup>
<b>Relative vapour density</b>	No data available.

**9.2 Other information**

<b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
<b>VOC (EC):</b>	0.2 kg/kg
<b>Oxidising properties:</b>	No data available.

**Information with regard to physical hazard classes**

<b>Aerosols</b>	Extremely flammable aerosol. Pressurised container: May burst if heated.
-----------------	--

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** Stable in standard stocking and use conditions.

**10.2 Chemical stability** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

Carbon dioxide is produced by the reaction with substances containing active oxygen, incl. water. This leads to an increase in pressure and temperature in closed containers.

**10.4 Conditions to avoid**

Heat, open flames, ignition sources, electrostatic charge  
Heating causes rise in pressure with risk of bursting.

**10.5 Incompatible materials** Avoid contact with strong oxidising agents and strong acids. Reacts with water.

**10.6 Hazardous decomposition products**

None under normal conditions of storage and use.

In the case of fire can be formed: carbon oxides, nitrogen oxides hydrogen cyanide, toxic pyrolysis products

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

**SECTION 11: Toxicological information**

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity** Harmful if inhaled.

**LD/LC50 values relevant for classification:**

There are no product specific data on toxicology available.

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

oral	LD50	> 2,000 mg/kg (rat) (OECD 401)
dermal	LD50	> 9,400 mg/kg (rabbit) (OECD 402)
inhalative	LC50/4h	0.31 mg/l (rat) (OECD 403)

**CAS: 85535-85-9 alkanes, C14-17, chloro**

oral	LD50	> 2,000 mg/kg (rat)
------	------	---------------------

**CAS: 115-10-6 dimethyl ether**

inhalative	LC50/4h	164,000 ppm (rat) (ECHA)
------------	---------	--------------------------

**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.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity**

Suspected of causing cancer.

**Reproductive toxicity**

May cause harm to breast-fed children.

**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.

**Subacute to chronic toxicity:** pMDI: NOAEL (inhalation): 0.2 mg/m<sup>3</sup>; LOAEL (inhalation): 1 mg/m<sup>3</sup> (OECD 453)

**Additional toxicological information:**

pMDI: In case of exposure to high levels, danger of irritating effects on eyes, nose, throat and respiratory tract irrespective of the concentration arises. Symptoms (breathing difficulties, cough, asthma) may even occur after several hours. Persons already sensitised to diisocyanates may develop allergic reactions even at very low concentrations of the substance. Long-term exposure may cause skin dryness or skin degreasing.

**11.2 Information on other hazards**

**Endocrine disrupting properties** None of the ingredients is listed.

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**
**SECTION 12: Ecological information**
**12.1 Toxicity**
**Aquatic toxicity:**

Very toxic to aquatic life with long lasting effects.

**CAS: 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

LC50/96h	> 1,000 mg/l (zebrafish, Danio rerio) (OECD 203)
EC50/24h	> 1,000 mg/l (water flea, Daphnia magna) (OECD 202)
EC50/3h	> 100 mg/l (activated sludge) (OECD 209)
ErC50/72h	> 1,640 mg/l (alga, Desmodesmus subspicatus) (OECD 201)
NOEC/21d	> 10 mg/l (water flea, Daphnia magna) (OECD 202)

**CAS: 85535-85-9 alkanes, C14-17, chloro**

LC50/96h	> 1 mg/l (freshwater shrimp, Gammarus pulex) > 5,000 mg/l (common bleak, Alburnus alburnus)
EC50/48h	0.006 mg/l (water flea, Daphnia magna) (OECD 202)
EC50/96h	3.2 mg/l (alga, Selenastrum capricornutum) (REACH)
NOEC	0.01 mg/l (water flea, Daphnia magna) (REACH)

**CAS: 115-10-6 dimethyl ether**

LC50/96h	1,783 mg/l (fish) (ECHA)
EC50/48h	756 mg/l (Daphnia sp.) (ECHA)
EC50/96h	154.9 mg/l (green alga) (ECHA)

**Additional information:** Insoluble in water, the PU foam spreads on the water surface.

**12.2 Persistence and degradability**

pMDI: Not readily biodegradable.

test: aerobic, inoculum: activated sludge; degradability: 0 %, 28 days (OECD 302 C)

Alkanes, C14-17, chloro:

The concentrations are most likely very small given the low volatility. Assumed atmospheric half-life: 1-2 days.

 Biodegradation in soil: Studies conducted on C14.5 C15.4 (average length of chain C) with 43.5 % and 50 % chlorination showed 57 % and 51 % decomposition of the tested substance after 36 hours. Biological decomposition in water and sediments: The simulation tests carried out on two C16 paraffins (chlorinated paraffins containing 35 % Cl2 and 58 % Cl2) showed a half-life (DT50) of 12 days and 58 days in fresh water sediment. Translated with [www.DeepL.com/Translator](http://www.DeepL.com/Translator) (free version)

Dimethyl ether: Not readily biodegradable.

**12.3 Bioaccumulative potential**

pMDI: No significant accumulation in organisms, the substance hydrolyses violently in water.

Bioconcentration factor (BCF): &lt;14 (OECD 305)

(Cyprinus carpio, exposure time 42 d, concentration 0.2 mg/l)

Alkanes, C14-17, chloro: limited bioaccumulation potential (BCF &lt;2000, BMF &lt;1)

**12.4 Mobility in soil** Very limited due to chemical reaction with water to form an insoluble product (PU foam).

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

**12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.

**12.7 Other adverse effects**

 Isocyanate reacts with water at the interface forming CO<sub>2</sub> and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by water-soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Recommendation**

Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers.

**European waste catalogue**

15 01 10 : Packaging containing residues of or contaminated by dangerous substances

15 01 04: metallic packaging

17 02 03: plastic

**Uncleaned packaging**

**Recommendation:**

Cans should be emptied completely and should preferably be recycled or reused in compliance with the local / national regulations. Cans not emptied completely or remains have to be disposed as hazardous waste.

**SECTION 14: Transport information**

**14.1 UN number or ID number**

**ADR, IMDG, IATA**

UN1950

**14.2 UN proper shipping name**

**ADR**

1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS

**IMDG**

AEROSOLS, MARINE POLLUTANT

**IATA**

AEROSOLS

**14.3 Transport hazard class(es)**

**ADR**



**Class**

2.5F Gases.

**Label**

2.1

**IMDG**



**Class**

2 Gases.

**Label**

2.1

**IATA**



**Class**

2 Gases.

**Label**

2.1

**14.4 Packing group**

**ADR, IMDG, IATA**

void

## Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

### 14.5 Environmental hazards

**Special marking (ADR):** Symbol (fish and tree)

**14.6 Special precautions for user** Warning: Gases.

**14.7 Maritime transport in bulk according to IMO instruments** not applicable

**UN "Model Regulation":** UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

## SECTION 15: Regulatory information

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

#### Seveso category

E1 Hazardous to the Aquatic Environment

P3a FLAMMABLE AEROSOLS

#### List of substances subject to authorisation (REACH, Annex XIV)

Medium Chain Chlorinated Paraffins (MCCP) [UVCB substances consisting of more than or 80% linear chloroalkanes with carbon chain lengths ranging from C14 to C17]: The substance has been included in the candidate list for possible inclusion in Annex XIV of REACH (published in accordance with Article 59(10) of REACH). Reason for inclusion: PBT (Article 57d); vPvB (Article 57e).

#### Restrictions according to Annex XVII of the Regulation (EC) No 1907/2006

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.

Methylenediphenyl diisocyanate (MDI), including some specific monomers, was included in Annex XVII (entry 56) of REACH by Regulation (EC) No 552/2009.

Diisocyanates,  $O = C = NR - N = C = O$ , were included in Annex XVII (entry 74) of REACH by Regulation (EU) 2020/1149.

#### Substances of very high concern (SVHC) according to REACH, Article 57

CAS: 85535-85-9 | alkanes, C14-17, chloro

**VOC (EC):** 20 %

**Classification according to VbF:** Void

**Water hazard class:** Water hazard class (German Regulation) 2 (self-assessment): hazardous for water.

**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.

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

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.  
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
H362 May cause harm to breast-fed children.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.  
EUH204 Contains isocyanates. May produce an allergic reaction.

**Further information:**

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008: Calculation method

**Date of previous version:** 09.11.2022

**Abbreviations and acronyms:**

CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  
UFI: Unique Formula Identifier  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
EC-Number: European Community number  
EINECS: European Inventory of Existing Commercial Chemical Substances  
M-factor: multiplying factor  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
IOELV: indicative occupational exposure limit values (EU)  
MAK: maximum concentration of a chemical substance in the workplace  
TRK: technical standard concentration  
AGW: occupational exposure limit  
DNEL: Derived No-Effect Level  
PNEC: Predicted No-Effect Concentration  
EC50: maximal effective concentration, 50%  
ErC50: median effective concentration for growth rate (algae)  
LC50: lethal concentration, 50%  
LD50: lethal dose, 50%  
NOEC: no observed effect concentration  
OECD: Organisation for Economic Co-operation and Development  
ECHA: European Chemicals Agency  
log Pow, Kow: partition coefficient (n-octanol/water)  
PBT: persistent, bioaccumulative and toxic properties  
vPvB: very persistent and very bioaccumulative properties  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
VOC: Volatile Organic Compounds  
SVHC: substances of very high concern  
VbF: Ordinance on the storage of combustible liquids, Austria  
REACH: Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
Flam. Gas 1A: Flammable gases – Category 1A  
Aerosol 1: Aerosols – Category 1  
Press. Gas (Comp.): Gases under pressure – Compressed gas  
Acute Tox. 4: Acute toxicity – 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  
Lact.: Reproductive toxicity – effects on or via lactation

**Safety data sheet**  
**according to Regulation (EC) No 1907/2006, Article 31**

Printing date 16.10.2025

Version 2

Revision: 29.08.2025

**Trade name: INSEBO FoamTec Brunnen 413 / INSEBO FoamXpert Brunnen 414**

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

**Data compared to the previous version altered: Section 1,2,3,5,7,8,9,11,12,16**