

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
Revision date Version 1.0

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

- 1.1. Product identifier**
Substance / mixture H2Foam Lite LDC50 v6
mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
mixture's intended use A component for the production of insulation foam. For professional use only.
- The use descriptors**
SU 3 Industrial uses: Uses of substances as such or in preparations* at industrial sites
SU 22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Disapproved uses of mixture The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name Icyne Europe Sprl
Address 30 Clos Chapelle aux Champs, Brussels, B-1200
Belgium
Phone +32 2 880 62 33
Competent person responsible for the safety data sheet
Name GRACILIS s.r.o.
E-mail info@gracilis.cz
- 1.4. Emergency telephone number**
National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification

- 2.1. Substance or mixture classification**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.

Acute Tox. 4, H302
Skin Irrit. 2, H315
Eye Dam. 1, H318

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment
Harmful if swallowed. Causes skin irritation. Causes serious eye damage.

- 2.2. Label elements**
Hazard pictogram



Signal word
Danger

Hazardous substances
TCPP
N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine
N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine
2-[2-(Dimethylamino)ethoxy]ethanol

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date	27. July 2018	Version	1.0
Revision date			

Precautionary statements

P280	Wear protective gloves/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P501	Dispose of contents/container to according to applicable regulations.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
EC: 911-815-4 Registration number: 01-2119486772-26	TCPP	35-45	Acute Tox. 4, H302	1
CAS: 6711-48-4 EC: 229-761-9	N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine	5-8	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314	
CAS: 3855-32-1 EC: 223-362-3	N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine	0,5-1,5	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1C, H314 Aquatic Chronic 3, H412	
CAS: 1704-62-7 EC: 216-940-1	2-[2-(Dimethylamino)ethoxy]ethanol	0,5-1,5	Acute Tox. 4, H312 Skin Corr. 1C, H314	

Notes

1 Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

Ingestion

Rinse out the mouth with clean water. Do not provide anything by mouth if the person is unconscious or if having cramps. Provide medical treatment.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date	27. July 2018	Version	1.0
Revision date			

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

Inhalation

Possible irritation of airways, cough, headache. Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

Skin contact

Causes skin irritation. Contact may cause redness, swelling and a painful sensation.

Eye contact

Causes serious eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision.

Ingestion

Disorder of digestive system, stomach pain, vomiting, diarrhoea.

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

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases (NO_x, ammonia, aldehydes, ketones, phosphorous oxides, hydrogen chloride, silicon oxides and other unidentified organic compounds) may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Closed containers with the product near the fire should be cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothings. Do not inhale gases and vapours. Wash hands and exposed parts of the body thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from heating / ignition sources.

7.3. Specific end use(s)

A component for the production of insulation foam.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

none

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date	27. July 2018	Version	1.0
Revision date			

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product according to EN 374. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Mask with a filter in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state liquid at 20°C
color white

Odour amine-like

Odour threshold data not available

pH 11.36 (undiluted)

Melting point/freezing point data not available

Initial boiling point and boiling range data not available

Flash point data not available

Evaporation rate data not available

Flammability (solid, gas) data not available

Upper/lower flammability or explosive limits

flammability limits data not available

explosive limits data not available

Vapour pressure data not available

Vapour density data not available

Relative density 1.11

Solubility(ies)

solubility in water soluble

solubility in fats data not available

Partition coefficient: n-octanol/water data not available

Auto-ignition temperature data not available

Decomposition temperature data not available

Viscosity data not available

Explosive properties data not available

Oxidising properties data not available

9.2. Other information

Density data not available

ignition temperature data not available

Dynamic viscosity 1000 mPa.s (at 23 °C).

SECTION 10: Stability and reactivity

10.1. Reactivity

May slowly corrode copper, aluminium, zinc and galvanized surfaces.

10.2. Chemical stability

The product is stable under normal conditions.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
Revision date Version 1.0

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents, nitrites, metals and isocyanates.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide, NO_x, ammonia, aldehydes, ketones, phosphorous oxides, hydrogen chloride, silicon oxides and other unidentified organic compounds are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Harmful if swallowed.

2-[2-(Dimethylamino)ethoxy]ethanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Determining method
Oral	LD ₅₀	2337 mg/kg		Rat (<i>Rattus norvegicus</i>)		
Dermal	LD ₅₀	1340 mg/kg		Rabbit		

N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Determining method
Oral	LD ₅₀	1389.4 mg/kg		Rat		
Dermal	LD ₅₀	992.4 mg/kg		Rabbit		

N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Determining method
Oral	LD ₅₀	1200-1650 mg/kg		Rat (<i>Rattus norvegicus</i>)		
Dermal	LD ₅₀	370 mg/kg		Rabbit		

TCPP

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Determining method
Dermal	LD ₅₀	>2000 mg/kg		Rabbit		Read-across
Inhalation (aerosols)	LC ₅₀	>4.6 mg/l	4 hour	Rat (<i>Rattus norvegicus</i>)		Read-across
Oral	LD ₅₀	632-2000 mg/kg		Rat (<i>Rattus norvegicus</i>)		Read-across

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
Revision date Version 1.0

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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - 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

Acute toxicity

Data for the mixture are not available.

2-[2-(Dimethylamino)ethoxy]ethanol

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	320 mg/l	96 hour	Fishes (Leuciscus idus)		
EC ₅₀	>100 mg/l	48 hour	Daphnia (Daphnia magna)		
NOEC	40 mg/l	72 hour	Algae		
EC ₅₀	160 mg/l	72 hour	Algae		

N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	92.5 mg/l	96 hour	Fishes (Branchydanio rerio)		
EC ₅₀	50.3 mg/l	48 hour	Daphnia (Daphnia magna)		
EC ₅₀	74.9 mg/l	72 hour	Algae		

N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	21.4-47 mg/l	96 hour	Fishes (Branchydanio rerio)		
EC ₅₀	50.3 mg/l	48 hour	Daphnia (Daphnia magna)		
EC ₅₀	7.9 mg/l	72 hour	Algae		
NOEC	1.2 mg/l	72 hour	Algae		

TCPP

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	51 mg/l	96 hour	Fishes (Pimephales promelas)		Read-across

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
 Revision date Version 1.0

TCPP

Parameter	Value	Time of exposure	Species	Environment	Determining method
EC ₅₀	131 mg/l	48 hour	Daphnia (Daphnia magna)		Read-across
EC ₅₀	82 mg/l	72 hour	Algae		Read-across
NOEC	13 mg/l	72 day	Algae		Read-across

Chronic toxicity

N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine

Parameter	Value	Time of exposure	Species	Environment	Determining method
NOEC	3.5 mg/l	48 hour	Daphnia (Daphnia magna)		QSAR

TCPP

Parameter	Value	Time of exposure	Species	Environment	Determining method
NOEC	5.2 mg/l	21 day	Fishes		QSAR, Read-across
NOEC	32 mg/l	21 day	Daphnia (Daphnia magna)		Read-across

12.2. Persistence and degradability

Data not available.

12.3. Bioaccumulative potential

2-[2-(Dimethylamino)ethoxy]ethanol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method
Log Kow	0.778					
BCF	3.16					

N-[3-(dimethylamino)propyl]-N,N',N'-trimethylpropane-1,3-diamine

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method
Log Kow	0					
BCF	2		Fishes (Cyprinus carpio)			Read-across

N'-[3-(dimethylamino)propyl]-N,N-dimethylpropane-1,3-diamine

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method
Log Kow	0.214					

TCPP

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Determining method
Log Kow	2.59					
BCF	0.8-4.6		Fishes (Cyprinus carpio)			

Not available.

12.4. Mobility in soil

Not available.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
Revision date Version 1.0

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Water Hazard Class: 1 (Self-assessment).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Legislation of waste

Council Directive 75/442/EEC on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date 27. July 2018
Revision date Version 1.0

Guidelines for safe handling used in the safety data sheet

P280 Wear protective gloves/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a doctor.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents/container to according to applicable regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road
BCF Bioconcentration Factor
CAS Chemical Abstracts Service
CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL Derived no-effect level
EC Identification code for each substance listed in EINECS
EC₅₀ Concentration of a substance when it is affected 50% of the population
EINECS European Inventory of Existing Commercial Chemical Substances
EmS Emergency plan
EU European Union
IATA International Air Transport Association
IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC₅₀ Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry
LC₅₀ Lethal concentration of a substance in which it can be expected death of 50% of the population
LD₅₀ Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC Lowest observed adverse effect concentration
LOAEL Lowest observed adverse effect level
log K_{ow} Octanol-water partition coefficient
MARPOL International Convention for the Prevention of Pollution From Ships
NOAEC No observed adverse effect concentration
NOAEL No observed adverse effect level
NOEC No observed effect concentration
NOEL No observed effect level
OEL Occupational Exposure Limits
PBT Persistent, Bioaccumulative and Toxic
PNEC Predicted no-effect concentration
ppm Parts per million
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
RID Agreement on the transport of dangerous goods by rail
UN Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB Substances of unknown or variable composition, complex reaction products or biological materials
VOC Volatile organic compounds
vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity
Aquatic Chronic Hazardous to the aquatic environment
Eye Dam. Serious eye damage
Skin Corr. Skin corrosion
Skin Irrit. Skin irritation

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

H2Foam Lite LDC50 v6

Creation date	27. July 2018	Version	1.0
Revision date			

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

More information

Skin corrosion classification was excluded by the Corrositex Test (49 CFR 173.136).

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.