

# ThermaGlue

## Safety Data Sheet

according to 1907/2006/EC, Article 31

Issued on: 23.04.2019

Version: 1.0.0

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

#### 1.1. Product identifier

ThermaGlue

#### 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**

Spray adhesive

Restricted to professional users

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

Thermaflex Izolacji sp. z o.o.

58-130 Żarów

ul. Przemysłowa 6, Poland

tel. +48 74 85-89-666

fax. +48 74 85-89-667

[biuro@thermaflex.com](mailto:biuro@thermaflex.com)

[www.thermaflex.com](http://www.thermaflex.com)

Safety responsible: Plant Director

#### 1.4. Emergency phone number

+48 605-222-120 (the line available 8:30 a.m. – 5 p.m.)

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

*Flam. Liq. 2 H225 Highly flammable liquid and vapour.*

*Skin Irrit. 2 H315 Causes skin irritation.*

*Eye Irrit. 2 H319 Causes serious eye irritation.*

*STOT SE 3 H336 May cause drowsiness or dizziness.*

*Aquatic Chronic 2 H411 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 GHS09

### Signal word *Danger*

#### Hazard-determining components of labelling:

hydrocarbons, C6, isoalkanes, <5% n-hexane  
cyclohexane  
ethyl acetate  
acetone

#### Hazard statements

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other
P260	Do not breathe mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves / eye protection.
P370+P378	In case of fire: Use for extinction: CO <sub>2</sub> , powder or water spray.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Additional information:

Contains Rosin. May produce an allergic reaction.  
Restricted to professional users.

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

## Section 3: Composition/ information on ingredients

### 3.1. Substances

n/a

### 3.2. Chemical characterisation: Mixtures

**Description:** Mixture of components listed below with non-hazardous additions

Dangerous components:		
CAS: 64742-49-0 Reg.nr.: 01-2119484651-34-xxxx	hydrocarbons, C6, isoalkanes, <5% n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	29.28%
CAS: 110-82-7 EINECS: 203-806-2 Reg.nr.: 01-2119463273-41-xxxx	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	22.95%
CAS: 141-78-6 EINECS: 205-500-4 Reg.nr.: 01-2119475103-46-xxxx	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	22.36%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49-xxxx	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	5.36%
CAS: 51839-25-9 EINECS: 257-467-0 Reg.nr.: 01-2119474697-20-xxxx	basic zinc carbonate ⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411	0.2%
CAS: 8050-09-7 EINECS: 232-475-7 Reg.nr.: 01-2119480418-32-xxxx	Rosin ⚠ Skin Sens. 1, H317	0.11%

**SVHC** Not applicable.

#### **Additional information:**

Hydrocarbons, C6-, isoalkanes, <5% n-hexane is a mixture of: hexane (mixture of isomers), cyclopentane, n-hexane and pentane. 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:**

Take affected persons out of danger area and lay down.

Remove any clothing soiled by the product.

#### **After inhalation:**

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

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:**

Rinse out mouth and then drink plenty of water. Do not induce vomiting.  
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 attention and special treatment needed**

No further relevant information available.

## Section 5: Firefighting measures

**5.1. Fire extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** Water with full jet

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

During heating or in case of fire poisonous gases are produced.

In case of fire, the following can be released:

Hydrogen chloride (HCl)

Carbon monoxide and carbon dioxide

Metal oxide

**5.3. Advice for firefighters**

**Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases.

## Section 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Keep people at a distance and stay on the windward side.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**6.2 Environmental precautions:**

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

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.



## 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

The usual precautionary measures are to be adhered to when handling chemicals.

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

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

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

#### Storage:

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

Store only in the original receptacle.

Protect from frost.

Protect from heat and direct sunlight.

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

Store away from foodstuffs.

#### Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

### 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

· <b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>110-82-7 cyclohexane</b>	
WEL	Short-term value: 1050 mg/m <sup>3</sup> , 300 ppm Long-term value: 350 mg/m <sup>3</sup> , 100 ppm
<b>141-78-6 ethyl acetate</b>	
WEL	Short-term value: 400 ppm Long-term value: 200 ppm
<b>67-64-1 acetone</b>	
WEL	Short-term value: 3620 mg/m <sup>3</sup> , 1500 ppm Long-term value: 1210 mg/m <sup>3</sup> , 500 ppm
· <b>DNELs</b>	

<b>64742-49-0 hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>		
Oral	DNEL Consumer	1301 mg/kg BW (Chronic effects; Systemic)
Dermal	DNEL Consumer	1377 mg/kg BW (Chronic effects; Systemic)
	DNEL Worker	13964 mg/kg BW (Chronic effects; Systemic)
Inhalative	DNEL Consumer	1131 mg/m <sup>3</sup> (Chronic effects; Systemic)
	DNEL Worker	5306 mg/m <sup>3</sup> (Chronic effects; Systemic)
<b>110-82-7 cyclohexane</b>		
Dermal	DNEL Worker	2016 mg/kg BW (Chronic effects; Systemic)
Inhalative	DNEL Worker	700 mg/m <sup>3</sup> (Acute effects; Local)
		700 mg/m <sup>3</sup> (Acute effects; Systemic)
		700 mg/m <sup>3</sup> (Chronic effects; Local)
		700 mg/m <sup>3</sup> (Chronic effects; Systemic)
<b>141-78-6 ethyl acetate</b>		
Oral	DNEL Consumer	4.5 mg/kg BW (Chronic effects; Systemic)
Dermal	DNEL Consumer	37 mg/kg BW (Chronic effects; Systemic)
	DNEL Worker	63 mg/kg BW (Chronic effects; Systemic)
Inhalative	DNEL Consumer	734 mg/m <sup>3</sup> (Acute effects; Local)
		734 mg/m <sup>3</sup> (Acute effects; Systemic)
		367 mg/m <sup>3</sup> (Chronic effects; Local)
	DNEL Worker	367 mg/m <sup>3</sup> (Chronic effects; Systemic)
		1468 mg/m <sup>3</sup> (Acute effects; Local)
		1468 mg/m <sup>3</sup> (Acute effects; Systemic)
		734 mg/m <sup>3</sup> (Chronic effects; Local)
		34 mg/m <sup>3</sup> (Chronic effects; Systemic)
<b>67-64-1 acetone</b>		
Oral	DNEL Consumer	62 mg/kg BW (Chronic effects; Systemic)
Dermal	DNEL Consumer	62 mg/kg BW (Chronic effects; Systemic)
	DNEL Worker	186 mg/kg BW (Chronic effects; Systemic)
Inhalative	DNEL Consumer	200 mg/m <sup>3</sup> (Chronic effects; Systemic)
	DNEL Worker	2420 mg/m <sup>3</sup> (Acute effects; Local)
		1210 mg/m <sup>3</sup> (Acute effects; Systemic)
<b>PNECs</b>		
<b>110-82-7 cyclohexane</b>		
PNEC Aquatic ecosystem		0.207 mg/l (Fresh water)
		0.207 mg/l (Marine water)
PNEC Aquatic ecosystem PNEC		3.267 mg/kg (Fresh water sediment)
		3.267 mg/kg (Marine water sediment)
Terrestrial ecosystem		2.99 mg/kg (Soil)
<b>141-78-6 ethyl acetate</b>		
PNEC Aquatic ecosystem		0.26 mg/l (Fresh water)
		0.026 mg/l (Marine water)
PNEC Aquatic ecosystem		650 mg/l (Sewage treatment)
		0.34 mg/kg (Fresh water sediment)
		0.034 mg/kg (Marine water sediment)

<b>67-64-1 acetone</b>	
<i>PNEC Aquatic ecosystem</i>	10.6 mg/l (Fresh water) 21.5 mg/l (Intermittent release) 1.06 mg/l (Marine water) 100 mg/l (Sewage treatment)
<i>PNEC Aquatic ecosystem PNEC</i>	30.4 mg/kg (Fresh water sediment) 3.04 mg/kg (Marine water sediment)
<i>Terrestrial ecosystem</i>	29.5 mg/kg (Soil)

**Additional information:** The lists valid during the making were used as basis

## 8.2. Exposure controls

### Personal protective equipment:

#### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Remove any clothing soiled by the product.

#### Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Recommended filter:

Filter AX

#### Protection of hands:



Protective gloves

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 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.

**For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable :**

Neoprene gloves

**Eye protection :**



Tightly sealed goggles

**Body protection:**

Protective work clothing

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### General information

Appearance:

Form

Fluid

Colour

Green

Yellowish

Red

Odour:

Characteristic

Odour threshold:

No data available

pH-value:

Not applicable

Change in condition

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

>48 °C

Flash point :

- 17 °C

Flammability (solid, gas) :

Not applicable

Ignition temperature :

>200 °C

Decomposition temperature :

No data available

Auto-ignition temperature :

Product is not selfigniting

Explosive properties :

Product is not explosive. However, formation of explosive air / vapour mixtures are possible

Explosion limits :

Lower :

1,0 Vol %





Upper :	11,5 Vol %
Oxidising properties :	No data available
Vapour pressure at 20 °C	250 hPa
Density at 20 °C :	0,83g/cm <sup>3</sup>
Vapour density	No data available
Evaporation rate	No data available
Solubility in / Miscibility with water:	Not miscible or difficult to mix
Partition coefficient: n-octanol/water:	No data available
Viscosity:	
Dynamic at 20 °C:	250 mPas
Solvent separation test:	No data available
Solvent content :	
Organic solvents :	80,1 %
Water :	0,4 %
VOC (EC)	80,05 %
Solids content:	19,6 %

## 9.2. Other information

The physical data presented above are typical values and should not be construed as a specification.

## 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

Decomposes with water, acids and alkalis.

Violent reactions with strong alkalis and oxidising agents.

### 10.4. Conditions to avoid

No further relevant information available.

### 10.5. Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

Hydrogen chloride (HCl)

Carbon monoxide and carbon dioxide

**11.1. Information on toxicological effects**

**Acute toxicity :** Based on available data, the classification criteria are not met.

<b>LD/LC50 values relevant for classification:</b>		
<b>64742-49-0 hydrocarbons, C6, isoalkanes, &lt;5% n-hexane</b>		
Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 20 mg/l (rat)
<b>110-82-7 cyclohexane</b>		
Oral	LD50	1300 mg/kg (mouse) > 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	14 mg/l (rat)
<b>141-78-6 ethyl acetate</b>		
Oral	LD50	4100 mg/kg (mouse) 10170 mg/kg (rat) 4935 mg/kg (rabbit)
Dermal	LD50	> 20000 mg/kg (rabbit)
Inhalative	LC50/4 h	31.0 mg/l (mouse)
		> 50 mg/l (rat)
<b>67-64-1 acetone</b>		
Oral	LD50	>3000 mg/kg (mouse) >5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rat) >15000 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (rat)

**Primary irritant effect:**

**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Contains Rosin. May produce an allergic reaction.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Based on available data, the classification criteria are not met.

**Reproductive toxicity**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause drowsiness or dizziness.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Section 12: Ecological information****12.1. Toxicity**

<b>Aquatic toxicity:</b>	
<b>110-82-7 cyclohexane</b>	
EC50 (48h)	0.9 mg/l (daphnia)
<b>141-78-6 ethyl acetate</b>	
EC50	> 164 mg/kg (daphnia)
<b>67-64-1 acetone</b>	
EC50	39 mg/kg (daphnia)

**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.

**· Ecotoxicological effects:**

· **Remark:** Toxic for fish

**· Additional ecological information:****· General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

**12.5. Results of PBT and vPvB assessment**

PBT: Not applicable

vPvB: Not applicable

**12.6. Other adverse effects**

No further relevant information available.

**Section 13: Disposal considerations**

### 13.1. Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

European waste catalogue	
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

#### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations

## Section 14: Transport information

### 14.1. UN number

ADR/RID/ADN, IMDG, IATA

UNI1133

### 14.2. UN proper shipping name

ADR/RID/ADN

1133 ADHESIVES, ENVIRONMENTALLY  
HAZARDOUS,  
special provision 640D

IMDG

ADHESIVES (HEXANES, CYCLOHEXANE), MARINE  
POLLUTANT

IATA

ADHESIVES

### 14.3. Transport hazard class(es)

#### ADR/RID/ADN



**Class**

3 (F1) Flammable liquids

**Label**

3

#### IMDG



**Class**

3 Flammable liquids

**Label**

3



IATA



**Class** 3 Flammable liquids  
**Label** 3

#### 14.4. Packing group

**ADR/RID/ADN, IMDG, IATA** II

#### 14.5. Environmental hazards

**Product contains environmentally hazardous substances:**

cyclohexane, hydrocarbons, C6, isoalkanes, <5% n-hexane

**Marine pollutant:** Symbol (fish and tree)

**Special marking (ADR/RID/ADN)** Symbol (fish and tree)

#### 14.6 Special precautions for user

Warning : Flammable liquids

Danger code (Kemler): 33

EMS Number: F-E,S-D

Stowage Category B

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

#### Transport/Additional information:

##### **ADR/RID/ADN**

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category 2

Tunnel restriction code D/E

##### **IMDG**

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

##### **UN "Model Regulation":**

UN 1133 ADHESIVES, SPECIAL PROVISION 640D, 3, II, ENVIRONMENTALLY HAZARDOUS

## Section 15: Regulatory information

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

#### **Directive 2012/18/EU**

#### **Named dangerous substances - ANNEX I**

None of the ingredients is listed.

#### **Seveso category**

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

#### **Qualifying quantity (tonnes) for the application of lower-tier requirements**

200 t

#### **Qualifying quantity (tonnes) for the application of upper-tier requirements**

500 t

#### **REGULATION (EC) No 1907/2006 ANNEX XVII**

Conditions of restriction: 3, 57

### 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**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

**Contact:** Drs. J.W. Diesveld

#### **Abbreviations and acronyms:**

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

IMDG: *International Maritime Code for Dangerous Goods*

IATA: *International Air Transport Association*

GHS: *Globally Harmonised System of Classification and Labelling of Chemicals*

EINECS: *European Inventory of Existing Commercial Chemical Substances*

ELINCS: *European List of Notified Chemical Substances*

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

VOC: *Volatile Organic Compounds (USA, EU)*

DNEL: *Derived No-Effect Level (REACH)*

PNEC: *Predicted No-Effect Concentration (REACH)*

LC50: *Lethal concentration, 50 percent*

LD50: *Lethal dose, 50 percent*

PBT: *Persistent, Bioaccumulative and Toxic*

SVHC: *Substances of Very High Concern*

vPvB: *very Persistent and very Bioaccumulative*

Flam. Liq. 2: *Flammable liquids, Hazard Category 2*

Skin Corr. 2: *Skin corrosion/irritation, Hazard Category 2*

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

Aqu. Chronic 2: *Hazardous to the aquatic environment (long-term), Hazard Category 2*

Flam. Liq. 2: *Flammable liquids – Category 2*

Skin Irrit. 2: *Skin corrosion/irritation – Category 2*

Eye Irrit. 2: *Serious eye damage/eye irritation – Category 2*

Skin Sens. 1: *Skin sensitisation – Category 1*

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

Asp. Tox. 1: *Aspiration hazard – Category 1*

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*

Aquatic Chronic 2: *Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*

**\* Data compared to the previous version altered.**