

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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025





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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

Trade name: Ethyl Furanone 10% PG natural

(Contd. of page 1)

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

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

Dangerous compor	nents:		
CAS: 57-55-6	Propylene glycol	50-100%	
EINECS: 200-338-0	substance with a Community workplace exposure limit		
	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	10%	
EINECS: 248-513-0	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319		
	ATE: LD50 oral: 1,730 mg/kg		
Additional information. For the wording of the listed beyond phrases refer to eastion 16			

• 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: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or alcohol resistant foam.

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.
- Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: Dilute with plenty of water.

(Contd. on page 3)

IE



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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

#### Trade name: Ethyl Furanone 10% PG natural

(Contd. of page 2)

- 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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 No special precautions are necessary if used correctly.

- · Information about fire and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Please refer to the product specification and/or Certificate of Analysis for product storage requirements.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

#### · Ingredients with limit values that require monitoring at the workplace:

#### CAS: 57-55-6 Propylene glycol

OEL Long-term value: 470\* 10\*\* mg/m<sup>3</sup>, 150\* ppm \*total vapour and particulates \*\*particulates

• Additional information: The lists valid during the making were used as a basis.

#### · 8.2 Exposure controls

- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- · Respiratory protection: Not required.
- Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

<sup>—</sup> IE



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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

#### Trade name: Ethyl Furanone 10% PG natural

(Contd. of page 3)

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

# • **Penetration time of glove material** The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

# SECTION 9: Physical and chemical properties

<ul> <li>9.1 Information on basic physical and chemic</li> </ul>	cal properties
· General Information	
· Physical state	Liquid
· Colour:	According to product specification
· Odour:	According to product specification
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boilir	ng
range	187 °C
Flammability	Not applicable.
Lower and upper explosion limit	
· Lower:	2.6 Vol %
· Upper:	12.6 Vol %
· Flash point:	107 °C
· Auto-ignition temperature:	371 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	Not determined.
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
Solubility	Not determined.
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log valu	
· Vapour pressure at 20 °C:	0.1 hPa
· Density and/or relative density	0.1 IIFa
· Density at 20 °C:	1.055 g/cm³
· Relative density	Not determined.
· Refractive Index	
	Not determined.
· Vapour density	
<ul> <li>9.2 Other information</li> </ul>	
· Appearance:	
Form:	Liquid
	(Contd. on page



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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

Trade name: Ethyl Furanone 10% PG natural

	(Contd. of page 4
Important information on protection of he	ealth
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	90.0 %
VOC (EC)	0.00 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical has	zard
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	
flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

#### SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

10.2 Chemical stability

• Thermal decomposition / conditions to be avoided:

- No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

#### **SECTION 11: Toxicological information**

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

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

#### · LD/LC50 values relevant for classification:

## ATE (Acute Toxicity Estimates)

Oral LD50 17,300 mg/kg (ATE)

(Contd. on page 6)



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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

(Contd. of page 5)

#### Trade name: Ethyl Furanone 10% PG natural

· Primary irritant effect:

- Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation Causes serious eye irritation.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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 Based on available data, the classification criteria are not met.
- 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.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes: Not hazardous for water.

## 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.
- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

# SECTION 14: Transport information

• 14.1 UN number or ID number • ADR, ADN, IMDG, IATA

Void

· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA

Void

(Contd. on page 7)



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

Printing date 24.01.2025

Version number 1

Revision: 09.01.2025

#### Trade name: Ethyl Furanone 10% PG natural

	(Contd. of page 6)
<ul> <li>14.3 Transport hazard class(es)</li> </ul>	
· ADR, ADN, IMDG, IATA · Class	Void
<ul> <li>14.4 Packing group</li> <li>ADR, IMDG, IATA</li> </ul>	Void
<ul> <li>14.5 Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No
· 14.6 Special precautions for user	Not applicable.
<ul> <li>14.7 Maritime transport in bulk accordi IMO instruments</li> </ul>	ng to Not applicable.
• Transport/Additional information: Not dangerous according to the above specifica	
· UN "Model Regulation":	Void

# SECTION 15: Regulatory information

	15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture				
	· Labelling according to Regulation (EC) No 1272/2008				
	The product is classified and labelled according to the CLP regulation.				
•	Hazard pictograms				
	GHS07				
	Signal word Warning				
•	· Hazard statements				
	H315 Causes skin irritation.				
	H319 Causes serious eye irritation.				
	Precautionary statements				
	P264Wash thoroughly after handling.P280Wear protective gloves / eye protection / face 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.				
	P332+P313 If skin irritation occurs: Get medical advice/attention.				
	P362+P364 Take off contaminated clothing and wash it before reuse.				
	P337+P313 If eye irritation persists: Get medical advice/attention.				
· Directive 2012/18/EU					
•	Named dangerous substances - ANNEX I None of the ingredients is listed. REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3				
•	DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in				
	electrical and electronic equipment – Annex II				
	None of the ingredients is listed.				
	(Contd. on page 8)				
_					



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

Printing date 24.01.2025

#### Version number 1

Revision: 09.01.2025

#### Trade name: Ethyl Furanone 10% PG natural

#### · REGULATION (EU) 2019/1148

(Contd. of page 7)

• Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

#### Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· 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

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- · Department issuing SDS: Product safety department
- Contact:

Product Safety Department productsafety@adv-bio.com

· Abbreviations and acronyms:

ADR: Accord relatif au transport international 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- ATE: Acute toxicity estimate values
- 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