341900 - INDUSTRIAL METHYLATED SPIRITS



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: 341900 - INDUSTRIAL METHYLATED SPIRITS

Other means of identification:

UFI: U6R0-J01D-200N-0WGH

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

Relevant uses (Industrial user): Solvent
For Industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Palace Chemicals Ltd
Speke Hall Industrial Estate
L24 1YA Liverpool –
United Kingdom

PALACE CHEMICALS (EUROPE) LTD
The Black Church, St Marys Place,
Dublin 7, D08 P4AX, Ireland
UK Tel: +44 (0) 151 4866101
ROI Tel: 180 093 8710

1.4 Emergency telephone number: 0151 486 6101, NH1 111, Ireland Poisons Information Centre - contact 018092166

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Flam. Liq. 2: Flammable liquids, Category 2, H225
STOT SE 2: Specific target organ toxicity — single exposure, Hazard Category 2, H371

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
STOT SE 2: H371 - May cause damage to organs.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe vapours
P264: Wash thoroughly after handling.
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.
P403+P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

methanol

UFI: U6R0-J01D-200N-0WGH

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Chemical description: Solvent/s

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 67-56-1 EC: 200-659-6 Index: 603-001-00-X REACH: 01-2119433307-44-XXXX	**methanol**[1]	ATP CLP00	**2.5 - <10%**
	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Flam. Liq. 2: H225; STOT SE 1: H370 - Danger	
CAS: 3734-33-6 EC: 223-095-2 Index: Not relevant REACH: 01-2120102843-65-XXXX	**Denatonium benzoate**[1]	Self-classified	**<1%**
	Regulation 1272/2008	Acute Tox. 2: H330; Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
methanol CAS: 67-56-1 EC: 200-659-6	% (w/w) >=10: STOT SE 1 - H370 3<= % (w/w) <10: STOT SE 2 - H371

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
methanol CAS: 67-56-1 EC: 200-659-6	LD50 oral	1980.8 mg/kg	
	LD50 dermal	5082.3 mg/kg	
	LC50 inhalation vapour	3 mg/L	
Denatonium benzoate CAS: 3734-33-6 EC: 223-095-2	LD50 oral	749 mg/kg	
	LD50 dermal	Not relevant	
	LC50 inhalation vapour	0.5 mg/L *	

*Equivalent ATE value of the substance applicable to the exposure route of the product. For the ATE value associated with the exposure route of the substance, see section 11.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Induce vomiting (ONLY IF PERSON IS CONSCIOUS!) and then ingest large quantities of liquid to dilute the toxin. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

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SECTION 4: FIRST AID MEASURES (continued)

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/ECC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

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SECTION 7: HANDLING AND STORAGE (continued)

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137 / The Dangerous Substances and Explosive Atmospheres Regulations 2002, 2002 No. 2776). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 5 ºC

Maximum Temp.: 30 ºC

Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

2024 Code of Practice for the Chemical Agents Regulations:

Identification		Occupational exposure limits		
methanol (1)		OEL (8h)	200 ppm	260 mg/m³
CAS: 67-56-1	EC: 200-659-6	OEL (15 min)		

(1) Skin

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
methanol	Oral	Not available	Not available	Not available	Not available
CAS: 67-56-1	Dermal	20 mg/kg	Not available	20 mg/kg	Not available
EC: 200-659-6	Inhalation	130 mg/m³	130 mg/m³	130 mg/m³	130 mg/m³
Denatonium benzoate	Oral	Not available	Not available	Not available	Not available
CAS: 3734-33-6	Dermal	Not available	Not available	1.43 mg/kg	Not available
EC: 223-095-2	Inhalation	Not available	Not available	4.99 mg/m³	Not available

DNEL (General population):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
methanol	Oral	4 mg/kg	Not available	4 mg/kg	Not available
CAS: 67-56-1	Dermal	4 mg/kg	Not available	4 mg/kg	Not available
EC: 200-659-6	Inhalation	26 mg/m³	26 mg/m³	26 mg/m³	26 mg/m³
Denatonium benzoate	Oral	Not available	Not available	0.51 mg/kg	Not available
CAS: 3734-33-6	Dermal	Not available	Not available	0.51 mg/kg	Not available
EC: 223-095-2	Inhalation	Not available	Not available	0.768 mg/m³	Not available

PNEC:

Identification				
methanol	STP	100 mg/L	Fresh water	20.8 mg/L
CAS: 67-56-1	Soil	100 mg/kg	Marine water	2.08 mg/L
EC: 200-659-6	Intermittent	1540 mg/L	Sediment (Fresh water)	77 mg/kg
	Oral	Not available	Sediment (Marine water)	7.7 mg/kg
Denatonium benzoate	STP	Not available	Fresh water	0.1 mg/L
CAS: 3734-33-6	Soil	4.95 mg/kg	Marine water	0.01 mg/L
EC: 223-095-2	Intermittent	1 mg/L	Sediment (Fresh water)	25 mg/kg
	Oral	Not available	Sediment (Marine water)	2.5 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: AX)	CE CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Butyl, Breakthrough time: > 480 min, Thickness: 0.5 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN ISO 16321-1:2022 + EN ISO 16321-3:2022 EN ISO 18526-(1,2,3,4):2020 EN ISO 18526-(1,2,3,4):2020 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013/A1:2021 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2019 EN ISO 20345:2022 EN 13832-1:2018	Replace boots at any sign of deterioration.

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	99.53 % weight
V.O.C. density at 20 ºC:	784.1 kg/m³ (784.1 g/L)
Average carbon number:	1.95
Average molecular weight:	45.39 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Transparent
Color:	Colourless
Odor:	Alcohol
Odour threshold:	Not available *

Volatility:

Boiling point at atmospheric pressure:	77 ºC
Vapour pressure at 20 ºC:	7035 Pa
Vapour pressure at 50 ºC:	32604.24 Pa (32.6 kPa)
Evaporation rate at 20 ºC:	Not available *

Product description:

Density at 20 ºC:	>787.8 kg/m³
Relative density at 20 ºC:	0.788
Dynamic viscosity at 20 ºC:	1.1 mPa·s
Kinematic viscosity at 20 ºC:	1.4 mm²/s

*Not available due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Kinematic viscosity at 40 ºC:	Not available *
Concentration:	Not available *
pH:	Not available *
Relative vapour density at 20 ºC:	Not available *
Partition coefficient n-octanol/water 20 ºC:	Not available *
Solubility in water at 20 ºC:	Not available *
Solubility properties:	Not available *
Decomposition temperature:	Not available *
Melting point/freezing point:	Not available *
Flammability:	
Flash Point:	13 ºC
Flammability (solid, gas):	Not available *
Autoignition temperature:	423 ºC
Lower flammability limit:	Not available *
Upper flammability limit:	Not available *
Particle characteristics:	
Median equivalent diameter:	Not available *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not available *
Oxidising properties:	Not available *
Corrosive to metals:	Not available *
Heat of combustion:	28.07 kJ/g
Aerosols-total percentage (by mass) of flammable components:	Not available *
Other safety characteristics:	
Surface tension at 20 ºC:	Not available *
Refraction index:	Not available *

*Not available due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

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SECTION 10: STABILITY AND REACTIVITY (continued)

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: ethanol (1: Carcinogenic to humans)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Harmful effects for health in the case of ingestion, contact with the skin or inhalation after a single exposure, resulting in depression of the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and, in serious cases, loss of consciousness.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
methanol	LD50 oral	1980.8 mg/kg	
CAS: 67-56-1	LD50 dermal	5082.3 mg/kg	
EC: 200-659-6	LC50 inhalation vapour	3 mg/L	
Denatonium benzoate	LD50 oral	749 mg/kg	Rat
CAS: 3734-33-6	LD50 dermal	>2000 mg/kg	
EC: 223-095-2	LC50 inhalation dust	0.2 mg/L	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
methanol	LC50	15400 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 67-56-1	EC50	Not relevant		
EC: 200-659-6	EC50	Not relevant		

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
methanol	BOD5	1236 g O2/g	Concentration	Not relevant
CAS: 67-56-1	COD	Not relevant	Period	Not relevant
EC: 200-659-6	BOD5/COD	Not relevant	% Biodegradable	Not relevant
Denatonium benzoate	BOD5	Not relevant	Concentration	100 mg/L
CAS: 3734-33-6	COD	Not relevant	Period	28 days
EC: 223-095-2	BOD5/COD	Not relevant	% Biodegradable	18.17 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
methanol	BCF	
CAS: 67-56-1	Pow Log	-0.77
EC: 200-659-6	Potential	
Denatonium benzoate	BCF	
CAS: 3734-33-6	Pow Log	2.2
EC: 223-095-2	Potential	

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
methanol	Koc	Not relevant	Henry	4.61E-1 Pa·m³/mol
CAS: 67-56-1	Conclusion	Not relevant	Dry soil	Yes
EC: 200-659-6	Surface tension	2.355E-2 N/m (25 ºC)	Moist soil	Yes
Denatonium benzoate	Koc	2466.04	Henry	Not relevant
CAS: 3734-33-6	Conclusion	Immobile	Dry soil	Not relevant
EC: 223-095-2	Surface tension	Not relevant	Moist soil	Not relevant

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EU) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2025 and RID 2025:



14.1	**UN number or ID number:**	UN1170
14.2	**UN proper shipping name:**	ETHANOL (ETHYL ALCOHOL)
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	144, 601
	Tunnel restriction code:	D/E
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 42-24:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1	**UN number or ID number:**	UN1170
14.2	**UN proper shipping name:**	ETHANOL (ETHYL ALCOHOL)
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	II
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	144
	EmS Codes:	F-E, S-D
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	Not relevant
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2026:



14.1	**UN number or ID number:**	UN1170
14.2	**UN proper shipping name:**	ETHANOL (ETHYL ALCOHOL)
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction(CWC): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000.000	50000.000

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.
Contains methanol. Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

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SECTION 15: REGULATORY INFORMATION (continued)

Other legislation:

Chemicals (Amendment) Act 2010 (No. 32 of 2010) as amended by S.I. No. 623/2015- Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2015
Chemicals Act 2008 (No. 13 of 2008)
Safety, Health and Welfare (chemical agents) (amendment) regulations 2021 (S.I. No. 232 of 2021) and associated Code of Practice
Chemical Agents Regulations (S.I. No. 619 of 2001)
European Communities (Waste Directive) Regulations, S.I. No. 126 of 2011
S.I. No. 315/2016 - European Union (Waste Directive) (Amendment) Regulations 2016.
S.I. No. 323/2020 - European Union (Waste Directive) Regulations 2020
Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015)
The Chemicals Act (CLP Regulation) Regulations 2011 (S.I. No. 102 of 2011)

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:
This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation
Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:
Not relevant
Texts of the legislative phrases mentioned in section 2:
H371: May cause damage to organs.
Texts of the legislative phrases mentioned in section 3:
The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual
CLP Regulation (EC) No 1272/2008:
Acute Tox. 2: H330 - Fatal if inhaled.
Classification procedure:
STOT SE 2: Calculation method
Advice related to training:
Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and
Principal bibliographical sources:
http://echa.europa.eu
Abbreviations and acronyms:
ADR: European agreement concerning the international carriage of dangerous goods by road

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The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -