MATERIAL SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006, 2020/878

Shell Window De-icer
Date: 29.07.2024
Version EN: 1.0

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

1.1. Product identifier Shell Window De-Icer
UFI: AXUS-DU4D-H009-XSX4

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: window deicer
Uses advised against: none

1.3. Details of the supplier of the safety data sheet
PPH PARYS Sp. z o.o.
ul. A. Walentynowicz 1, 20-328 Lublin
tel. +48 81 443 12 10, fax +48 81 443 12 55
e-mail: sekretariat@parys.pl
E-mail address of the person responsible for data sheet: marzec@parys.pl

1.4. Emergency telephone
112 (general emergency telephone number), 998 (fire-brigade), 999 (ambulance);

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Acc. to 1272/2008
Flam. Liq. 2; H225
Eye Irrit. 2; H319

Human health dangers:
Causes serious eye irritation.
Environmental hazards:
None.
Physic-chemical hazards:
Highly flammable liquid and vapour.

2.2. Label elements
Pictograms:

Signal Word: Danger

Hazard Statement:
H225 – Highly flammable liquid and vapour.
H319 – Causes serious eye irritation.

Precautionary Statement:
P102 – Keep out of reach of children.
P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 – Keep container tightly closed.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235 – Store in a well-ventilated place. Keep cool.
P501 – Dispose of contents/container in accordance with local / regional / national / international regulations.

2.3. Other hazards
Annex XIII - Criteria for the identification of Persistent, Bioaccumulative and Toxic substances (BBT), and very Persistent and very Bioaccumulative substances (vPvB):
The mixture has no substances meeting the criteria as PBT or vPvB.

Substances with endocrine disrupting properties (in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605):
The mixture has no substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable.

3.2. Mixtures
Hazardous ingredients:

Substance name	contains %	Hazard Class and Category Code(s)	Hazard Statement Code(s) Suppl. Hazard statement Code(s)	- Specific Conc. Limits, - M-factors - ATEs
Ethanol* CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH No.: 01-2119457610-43-XXXX	50 - <60	Flam. Liq. 2 Eye Irrit. 2	H225 H319	Eye Irrit. 2; H319: c ≥ 50%
Ethane-1,2-diol* CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1 REACH No.: 01-2119456816-28-XXXX	5 - <10	Acute Tox. 4 STOT RE 2	H302 H373	-
Butanone* CAS No.: 78-93-3 EC No.: 201-159-0 Index No.: 606-002-00-3 REACH No.: 01-2119457290-43-XXXX	<0,5	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336 EUH066	-
propan-2-ol* CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH No.: 01-2119457558-25-XXXX	<0,5	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	-

Full text of H-phrases in Section 16
*Substance for which workplace exposure limits are available

SECTION 4: First aid measures

4.1. Description of first aid measures
Skin contact:
Take off contaminated clothing. Wash with plenty of water and soap. In case of skin irritation: seek advice / seek medical attention.
Eye contact:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Avoid strong stream, due to the risk of corneal damage. Get medical advice.
Inhalation:
If irritation symptoms occur, provide fresh air.
Ingestion:
Do not induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Product vapours may cause irritation of the respiratory tract and eyes.
Contact with eyes may cause irritation, redness and tearing.
Repeated exposure may cause skin dryness.
Ingestion of the large amount of the product may cause nausea, nausea, abdominal pain, dizziness.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: carbon dioxide, dry powder extinguishers, water spray, alcohol-resistant foam. Use appropriate extinguishing method for conditions.
Unsuitable extinguishing media: Do not use a direct water jet.

5.2. Special hazards arising from the substance or mixture
Highly flammable liquid and vapour.
Vapors can accumulate in the lower parts of rooms.
During the fire, they release toxic decomposition products: carbon oxides.

5.3. Advice for firefighters
The containers in fire area should be cooled with water spray, if it is possible removed from the danger zone.
Do not allow fire-fighting water run-off into surface water, groundwater and sewer.
In the event of a fire in a confined space should wear protective clothing and breathing apparatus with compressed air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel: Notify the appropriate service. Reduce access to the area of failure until the relevant cleaning operations have been completed. Avoid contact with the released product.
For emergency responders: Ensure adequate ventilation. Use personal protective equipment (according to section 8). Remove all potential sources of ignition.

6.2. Environmental precautions
Do not allow this product to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up
Prevent leakage and absorb with inert, absorbent material (such as sand, earth, vermiculite, diatomaceous earth, etc.). The contaminated material should be placed in properly labelled containers for disposal in accordance with applicable regulations.
In case of releasing large amounts of product, ensure efficient ventilation and notify the appropriate service.
Keep away from ignition sources, use non-sparking equipment. Vapors with air can form flammable / explosive mixtures.

6.4. Reference to other sections
Refer to protective measures listed in section 8.
Refer to disposal considerations listed in section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Provide adequate ventilation. Avoid contact with the eyes and skin. Avoid breathing vapours
When working with large amounts of the product, ensure easy access to extinguishing media and fire-fighting equipment.
Keep away from ignition sources - no smoking. Use non-sparking tools. Take action to prevent static discharges.
Do not eat, drink or smoke while using the product. Wash your hands after using the product. Remove contaminated clothing and protective equipment from entering food areas.

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area in a properly labelled original container.
Do not store together with oxidizing agents.
Avoid direct sunlight and sources of heat, hot surfaces and open flames.
Recommended storage temperature: 5 - 30ºC.
Keep out of the reach of children.

Do not store together with foodstuffs.

7.3. Specific end use(s)
See section 1.2. - no additional recommendations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational exposure limit values:

Substance	**Ethanol**			
CAS No.	**64-17-5**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Austria	1000	1900	2000	3800
Belgium	1000	1907		
Denmark	1000	1900	2000	3800
Finland	1000	1900	1300 (1)	2500 (1)
France	1000	1900	5000	9500
Germany (AGS)	200	380	800 (1)	1520 (1)
Germany (DFG)	200	380	800 (1)	1520 (1)
Hungary		1900		3800 (1)
Ireland			1000 (1)	
Latvia		1000		
Norway	500	950		
Poland		1900		
Romania	1000	1900	5000 (1)	9500 (1)
Spain			1000	1910
Sweden	500	1000	1000 (1)	1900 (1)
Switzerland	500	960	1000	1920
The Netherlands		260 (1)		1900 (1)(2)
United Kingdom	1000	1920		
	Remarks			
Finland	(1) 15 minutes average value			
Germany (AGS)	(1) 15 minutes average value			
Germany (DFG)	(1) 15 minutes average value			
Hungary	(1) 15 minutes average value			
Ireland	(1) 15 minutes reference period			
Romania	(1) 15 minutes average value			
Sweden	(1) 15 minutes average value			
The Netherlands	(1) Skin (2) 15 minutes average value			

Substance	**Ethane-1,2-diol**			
CAS No.	**107-21-1**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Belgium	20 (1)(2)	52 (1)(2)	40 (1)(2)(3)	104 (1)(2)(3)
European Union	**20**	**52**	**40 (1)**	**104 (1)**
Finland	20	50	40 (1)	100 (1)
Hungary		52 (1)		104 (1)(2)
Italy	20 (1)	52 (1)	40 (1)(2)	104 (1)(2)
Norway	20 (1)	52 (1)	40 (1)(2)	104 (1)(2)
Romania	20	52	40 (1)	104 (1)
Sweden	10	25	40 (1)	104 (1)

The Netherlands		52 (1)		104 (1)(2)
	Remarks			
Belgium	(1) Additional indication "D" means that the absorption of the agent through the skin, mucous membranes or eyes is an important part of the total exposure. It can be the result of both direct contact and its presence in the air. (2) Additional indication "M" means that irritation occurs when the exposure exceeds the limit value or there is a risk of acute poisoning. The work process must be designed in such a way that the exposure never exceeds the limit value. For evaluation, the sampled period should be as short as possible. However, the sampled period shall be long enough to perform a reliable measurement. The measured result shall be related to the considered period. (3) 15 minutes average value			
European Union	(1) 15 minutes average value Bold-type: Indicative Occupational Exposure Limit Value (IOELV) ~ (for references see bibliography)			
Finland	(1) 15 minutes average value			
Hungary	(1) Skin (2) 15 minutes average value			
Italy	(1) Skin (2) 15 minutes average value			
Norway	(1) Skin (2) 15 minutes average value			
Romania	(1) 15 minutes average value			
Sweden	(1) 15 minutes average value			
The Netherlands	(1) Skin (2) 15 minutes average value			

Substance	**Ethane-1,2-diol, particulate**			
CAS No.	**107-21-1**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Denmark		10		20
European Union	**20**	**52**	**40 (1)**	**104 (1)**
Germany (AGS)	10 (1)(2)	26 (1)(2)	20 (1)(2)(3)	52 (1)(2)(3)
Germany (DFG)	10 (1)(2)	26 (1)(2)	20 (1)(2)(3)	52 (1)(2)(3)
Hungary		52		104
Ireland		10		
Latvia	20	52	40 (1)	104 (1)
Poland		15		50
Spain	20	52	40	104
Sweden	10	25	20 (1)	50 (1)
Switzerland	10	26	20	52
The Netherlands		10		
	Remarks			
European Union	(1) 15 minutes average value Bold-type: Indicative Occupational Exposure Limit Value (IOELV) ~ (for references see bibliography)			
Germany (AGS)	(1) Inhalable fractionand vapour (2) Skin (3) 15 minutes average value			
Germany (DFG)	(1) Inhalable fraction and vapour (2) Skin (3) 15 minutes average value			
Latvia	(1) 15 minutes average value			
Spain	skin			
Sweden	(1) 15 minutes average value			

Substance	**Ethane-1,2-diol, vapour**			
CAS No.	**107-21-1**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Austria	10	26	20	52
Denmark	10 (1)	26 (1)	20 (1)(2)	52 (1) (2)
European Union	**20**	**52**	**40 (1)**	**104 (1)**
France	*20*	*52*	*40 (1)*	*104 (1)*
Germany (AGS)	10 (1)(2)	26 (1)(2)	20 (1)(2)(3)	52 (1)(2)(3)
Germany (DFG)	10 (1)(2)	26 (1)(2)	20 (1)(2)(3)	52 (1)(2)(3)
Ireland	20	52	40 (1)	104 (1)
Italy	20 (1)	52 (1)	40 (1)(2)	104 (1)(2)
Poland		15		50
Spain	20 (1)	52 (1)	40 (1)(2)	104 (1)(2)
Sweden	10	25	20 (1)	50 (1)
Switzerland	10	26	20	52
The Netherlands		52		104
United Kingdom	20	52	40	104
	Remarks			
Denmark	(1) Skin (2) 15 minutes average value			
European Union	(1) 15 minutes average value Bold-type: Indicative Occupational Exposure Limit Value (IOELV) ~ (for references see bibliography)			
France	Italic type: Indicative statutory limit values Skin (1) 15 minutes average value			
Germany (AGS)	(1) Inhalable fractionand vapour (2) Skin (3) 15 minutes average value			
Germany (DFG)	(1) Inhalable fraction and vapour (2) Skin (3) 15 minutes average value			
Ireland	(1) 15 minutes reference period			
Italy	(1) skin (2) 15 minutes average value			
Spain	(1) Skin (2) 15 minutes average value			
Sweden	(1) 15 minutes average value			

Substance	**Butanone**			
CAS No.	**78-93-3**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Austria	100	295	200	590
Belgium	200	600	300 (1)	900 (1)
Denmark	50 (1)	145 (1)	100 (1) (2)	290 (1) (2)
European Union	**200**	**600**	**300 (1)**	**900 (1)**
Finland	20	60	100 (1)	300 (1)
France	**200**	**600**	**300 (1)**	**900 (1)**
Germany (AGS)	200 (1)	600 (1)	200 (1) (2)	600 (1) (2)
Germany (DFG)	200 (1)	600 (1)	200 (1) (2)	600 (1) (2)
Hungary		600 (1)		900 (1) (2)
Ireland	200	600	300 (1)	900 (1)
Italy	200	600	300 (1)	900 (1)
Latvia	67	200	300 (1)	900 (1)
Norway	75	220		
Poland		450 (1)		900 (1) (2)
Romania	200	600	300 (1)	900 (1)
Spain	200	600	300	900
Sweden	50	150	300 (1)	900 (1)
Switzerland	200	590	200	590
The Netherlands	197 (1)	590 (1)	300 (1) (2)	900 (1) (2)

United Kingdom	200 (1)	600 (1)	300 (1) (2)	899 (1) (2)
	Remarks			
Belgium	(1) 15 minutes average value			
Denmark	(1) Skin (2) 15 minutes average value			
European Union	(1) 15 minutes average value			
Finland	(1) 15 minutes average value			
France	(1) 15 minutes average value			
Germany (AGS)	(1) Skin (2) 15 minutes average value			
Germany (DFG)	(1) Skin (2) 15 minutes average value			
Hungary	(1) Skin (2) 15 minutes average value			
Ireland	(1) 15 minutes reference period			
Italy	(1) 15 minutes average value			
Latvia	(1) 15 minutes average value			
Poland	(1) Skin (2) 15 minutes average value			
Romania	(1) 15 minutes average value			
Sweden	(1) 15 minutes average value			
The Netherlands	(1) Skin (2) 15 minutes average value			
United Kingdom	(1) Skin (2) 15 minutes average value			

Substance	**Propan-2-ol**			
CAS No.	**67-63-0**			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m³	ppm	mg/m³
Austria	200	500	800	2000
Belgium	200	500	400 (1)	1000 (1)
Denmark	200	490	400	980
Finland	200	500	250 (1)	620 (1)
France			400	980
Germany (AGS)	200	500	400 (1)	1000 (1)
Germany (DFG)	200	500	400 (1)	1000 (1)
Hungary		500 (1)		1000 (1) (2)
Ireland	200		400 (1)	
Latvia		350		600 (1)
Norway	100	245		
Poland		900 (1)		1200 (1) (2)
Romania	81	200	203 (1)	500 (1)
Spain	200	500	400	1000
Sweden	150	350	250 (1)	600 (1)
Switzerland	200	500	400	1000
United Kingdom	400	999	500 (1)	1250 (1)
	Remarks			
Belgium	(1) 15 minutes average value			
Finland	(1) 15 minutes average value			
Germany (AGS)	(1) 15 minutes average value			
Germany (DFG)	(1) 15 minutes average value			
Hungary	(1) Skin (2) 15 minutes average value			
Ireland	(1) 15 minutes reference period			

Latvia	(1) 15 minutes average value
Poland	(1) Skin (2) 15 minutes average value
Romania	(1) 15 minutes average value
Sweden	(1) 15 minutes average value
United Kingdom	15 minutes average value

Ethanol
DNEL Industrial, inhalation, long-term, systemic: 950mg/m^3
DNEL Industrial, inhalation, short-term, local: 1900mg/m^3
DNEL Industrial, dermal, long-term, systemic: 343mg/kg
DNEL consumer, inhalation, long-term, systemic: 114mg/m^3
DNEL consumer, inhalation, short-term, local: 950mg/m^3
DNEL consumer, dermal, long-term, systemic: 206mg/kg/d
DNEL consumer, oral, long-term, systemic: 87mg/kg/d
PNEC fresh water: 0,96mg/l
PNEC marine water: 0,79mg/l
PNEC sediment fresh water: 3,6mg/kg
PNEC sediment marine water: 2,9mg/kg
PNEC Intermittent release: 2,75mg/l
PNEC STP: 580mg/l
PNEC soil: 0,63mg/kg
PNEC oral, secondary poisoning: 0,72g/kg
Ethane-1,2-diol
DNEL Industrial, inhalation, long-term, systemic: 35mg/m^3
DNEL Industrial, dermal, long-term, systemic: 106mg/kg
DNEL consumer, inhalation, short-term, local: 7mg/m^3
DNEL consumer, dermal, long-term, systemic: 53mg/kg/d
PNEC fresh water: 10mg/l
PNEC marine water: 1mg/l
PNEC sediment fresh water: 20,9mg/kg
PNEC STP: 199mg/l
PNEC soil: 1,53mg/kg

8.2. Exposure controls
Engineering controls:
Observe occupational health and safety.
General ventilation is recommended.
Wash hands during breaks and after working with the product.

Individual protection measures, such as personal protective equipment:
Personal protective equipment should be selected according to the hazards present at the workplace, taking into account Regulation (EU) 2016/425 of the European Parliament and of the Council and in accordance with the relevant CEN standards.

Eye protection:
It is not required for normal use.
It is recommended to use safety glasses (EN ISO 16321-1:2022-10) if there is a risk of contact with eyes.
Skin protection:
Hands:
It is not required for normal use.
It is recommended to use chemical resistant gloves (EN 374) if repeated or long-term contact.
Recommended material: neoprene, PVC
Thickness: >=0,4mm
Time of penetration: >480min.
The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer.
Other:
It is not required for normal use.

Respiratory Protection:
It is not required for normal use.
In case of insufficient room ventilation, wear respiratory protection when working with large amounts of the product.

Thermal hazards:
Not applicable.
Environmental exposure controls:
Prevent the spread in the environment and enter drains and watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a)	Physical state	Liquid
b)	Colour	Colourless
c)	Odour	Characteristic
d)	Melting point/freezing point *(Does not apply to gases)*	<-60°C
e)	Boiling point or initial boiling point and boiling range	>78°C
f)	Flammability *(Applies to gases, liquids and solids)*	Highly flammable liquid and vapour
g)	Lower and upper explosion limit *(Do not apply to solids)*	Lower: 3,5%vol. (ethanol) Upper: 15%vol. (ethanol)
h)	Flash point *(Does not apply to gases, aerosols and solids)*	22°C
i)	Auto-ignition temperature *(Only applies to gases and liquids)*	No data available
j)	Decomposition temperature *(Only applies to self-reactive substances and mixtures, organic peroxides, and other substances and mixtures that may decompose)*	Not applicable
k)	pH *(Does not apply to gases)*	7,0 – 8,5
l)	Kinematic viscosity *(Only applies to liquids)*	No data available
m)	Solubility	Completely soluble in water
n)	Partition coefficient n-octanol/water (log value)	Not applicable – mixture
o)	Vapour pressure	No data available
p)	Density and/or relative density *(Only apply to liquids and solids)*	0,902 – 0,904 g/cm^3 (20°C)
q)	Relative vapour density *(Only applies to gases and liquids)*	No data available
r)	Particle characteristics *(Only apply to solids)*	Not applicable

9.2. Other information
None.

SECTION 10: Stability and reactivity

10.1. Reactivity
The mixture is not reactive.
10.2. Chemical stability
The mixture is stable under normal conditions of use, storage and transport.
10.3. Possibility of hazardous reactions
The vapours may form explosive mixtures with the air.
10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
10.5. Incompatible materials
Strong oxidants.
10.6. Hazardous decomposition products
No decomposition under recommended conditions of use and storage.
Thermal decomposition products - see section 5.

SECTION 11: Toxicological information

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

a)	Acute toxicity	Based on the available data, the classification criteria are not met
b)	Skin corrosion/irritation	Based on the available data, the classification criteria are not met
c)	Serious eye damage/irritation	**Causes serious eye irritation.**
d)	Respiratory or skin sensitization	Based on the available data, the classification criteria are not met
e)	Germ cell mutagenicity	Based on the available data, the classification criteria are not met
f)	Carcinogenicity	Based on the available data, the classification criteria are not met
g)	Reproductive toxicity	Based on the available data, the classification criteria are not met
h)	STOT-single exposure	Based on the available data, the classification criteria are not met
i)	STOT-repeated exposure	Based on the available data, the classification criteria are not met
j)	Aspiration hazard	Based on the available data, the classification criteria are not met

Ethanol
LD50 oral: 10470mg/kg
LD50 dermal: 15800 mg/kg
LC50 inhalation: 30000mg/m^3

11.2. Information on other hazards
Endocrine disrupting properties
None.

SECTION 12: Ecological information

12.1.Toxicity
The mixture is not classified as hazardous to the environment.
Prevent the spread in the environment and enter drains and watercourses.

Ethanol
LC50 fish (Oncorhynchus mykiss): 11200mg/l, 96h
EC50 crustaceans (Ceriodaphnia dubia): 5012mg/l, 48h
EC50 crustaceans (Artemia salina): 857mg/l, 48h
EC50 algae (Chlorella vulgaris): 275mg/l 72h
Butanone
LC50 fish (Pimephales promelas): 2993 mg/l, 96h
EC50 crustaceans (Daphnia magna): 308 mg/l, 48h
EC50 algae (Pseudokirchneriella subcapitata): 1972 mg/l, 72h
Propan-2-ol
LC50 fish (Pimephales promelas): 9640 mg/l, 96h
EC50 crustaceans (Daphnia magna): >10000 mg/l, 24h
EC50 algae (Scenedesmus quadricauda): 1800 mg/l, 72h

12.2. Persistence and degradability
For the mixture: no information available

12.3. Bioaccumulative potential
For the mixture: no information available

12.4. Mobility in soil
For the mixture: no information available

12.5. Results of PBT and vPvB assessment
The mixture has no substances that meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties
The mixture has no substances with endocrine disrupting properties.

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recommendations for the product: Dispose of in accordance with local regulations. Store in original containers. Waste code should be given at the place of manufacture.

Recommendations for used packaging: Recycle / dispose of packaging waste in accordance with applicable regulations.
Only fully emptied packaging can be recycled.

Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives as amended
European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1. UN number	1170	1170	1170	1170

14.2. UN proper shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution
14.3. Transport hazard class(es)	3 Label: 3 	3 Label: 3 	3 Label: 3 	3 Label: 3
14.4. Packing group	II	II	II	II
14.5. Environmental hazards	No	No	No	No
14.6 Special precautions for user	Classification code: F1 Limited quantities LQ: 1L Excluded quantities: E2 Hazard identification number: 33 Transport category: 2 Tunnel restriction code: D/E	Classification code: F1 Limited quantities LQ: 1L Excluded quantities: E2	LQ: 1L EmS: F-E, S-D Stowage and handling: Category A Segregation: -	**Passenger Aircraft (PAX)** IATA LTD QTY Pkg Inst: Y341 IATA LTD QTY Max Qty per Pkg: 1L IATA Pkg Inst: 353 Max Capacity per inner receptacle: 1L Max Net Qty per Pkg: 5L **Cargo Aircraft (CAO)** Cargo Air Packing Inst: 364 Cargo Air Max : 30L IATA Special Prov: A3, A58, A180
14.7. Maritime transport in bulk according to IMO instruments	No date available			

SECTION 15: Regulatory information

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

EU REGULATIONS:

1. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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.
2. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
3. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 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.
4. Regulation (EU) 2016/425 of The European Parliament and of The Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC
5. Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
6. Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC

7. Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
8. Commission Directive (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU
9. Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
10. Directive 2008/98/EC Of The European Parliament And Of The Council of 19 November 2008 on waste and repealing certain Directives as amended
11. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended

The Seveso III Directive

- Directive 2012/18/EU Of The European Parliament And Of The Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

Column 1	Column 2	Column 3
Hazard categories in accordance with Regulation (EC) No 1272/2008	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5a FLAMMABLE LIQUIDS	10	50
P5b FLAMMABLE LIQUIDS	50	200
P5c FLAMMABLE LIQUIDS	5 000	50 000

Biocidal products

- Regulation (EU) No 528/2012 Of The European Parliament And Of The Council of 22 May 2012 concerning the making available on the market and use of biocidal products

Not applicable

Explosives precursors

- Regulation (EU) 2019/1148 Of The European Parliament And Of The Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

Not applicable

Drug precursors

- Regulation (EC) No 273/2004 of The European Parliament And Of The Council of 11 February 2004 on drug precursors

Butanone [CAS: 78-93-3] - Drug precursors Category 3 (The purchase of the substances is possible in unlimited quantities, no declaration is required. Information on the place of placing on the market of category 3 precursors is provided to the Sanitary Inspector responsible for the supervision of trade in drug precursors upon request in accordance with Commission Delegated Regulation (EU) 2015/1011 of 24 April 2015)

Detergents

- Regulation (EC) No 648/2004 of The European Parliament And Of The Council of 31 March 2004 on detergents

Not applicable

- List of substances subject to authorization (REACH; Annex XIV):
Not applicable

- Candidate list of SVHCs:
Not applicable

- Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (REACH; Annex XVII):
Not applicable

15.2. Chemical safety assessment
No chemical safety assessments for the mixture.

SECTION 16: Other information

Abbreviations and acronyms, list of relevant hazard statements used in the safety data sheet:
H225 – Highly flammable liquid and vapour
H302 – Harmful if swallowed.
H319 – Causes serious eye irritation
H336 – May cause drowsiness or dizziness.
H373 – May cause damage to organs through prolonged or repeated exposure
EUH066 – Repeated exposure may cause skin dryness or cracking
Flam. Liq. 2 – Flammable liquid, cat. 2
Acute Tox. 4 – Acute toxicity cat. 4
Eye Irrit. 2 – Eye irritation cat. 2
STOT SE 3 – Specific target organ toxicity - single exposure cat. 3
STOT RE 2 – Specific target organ toxicity - repeated exposure STOT cat. 2
DNEL – derived no-effect level
PNEC – predicted no effect concentration
LD50 – lethal dose, 50%
LC50 – lethal concentration, 50%
EC50 – effective concentration, 50%
PBT – Persistent, Bioaccumulative and Toxic
vPvB – very Persistent and very Bioaccumulative
ADR – International Carriage of Dangerous Goods by Road
RID – International Carriage of Dangerous Goods by Rail
IMDG – International Maritime Dangerous Goods
ICAO – Safe Transport of Dangerous Goods by Air

Classification procedure:

Flam. Liq. 2; H225	Based on value of flash point
Eye Irrit. 2; H319	Based on the content of the ingredients (calculation method)

Training:
Before working with the product is recommended safety training of employees in connection with the occurrence of workplace chemicals. Documentation should be prepared and employees should be familiarized with the results of risk assessment in the workplace associated with the presence of chemical agents.

RESOURCES
Annex to Regulation (EU) 2020/878.
Current legislation (Section 15).
Information Agency for Chemical Substances.