pro-POWER

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	PROPOWER GLASS CLEANER
Registration number	-
Synonyms	None.
Product code	UDS000144AE

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

Identified uses	Cleaners - Heavy duty
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company name	Premier Farnell plc.
Address	150 Armley Road Leeds LS12 2QQ United Kingdom
Telephone	+44 (0) 870 129 8608
Fax	-
E-mail	
Website	

Company name	Premier Farnell plc.
Address	150 Armley Road Leeds LS12 2QQ United Kingdom
Telephone	+44 (0) 870 129 8608
Fax	
E-mail	
Website	

1.4. Emergency telephone no Tel.: +44 (0) 8447 880088 (office hours: 9-17h GMT)

Austria National Poisons Information Centre	+431 406 4343 (Available 24 hours a day.)
Belgium National Poisons Control Center	070 245 245 (Available 24 hours a day.)
Bulgaria National Toxicological Information Centre	+359 2 9154233 (Available 24 hours a day.)
Czech Republic National Poisons Information Centre	+420 224 919 293, or +420 224 915 402 (Hours of operation not provided.)
Denmark National Poisons Control Center	+45 82 12 12 12 (Available 24 hours a day.)
Estonia National Poisons Information Centre	16662 or abroad: (+372) 626 9390 (Monday 9:00AM to Saturday 9:00AM (closed on Sundays and on national holidays))

Finland National Poison Information Center	(09) 471 977 (direct) or (09) 4711 (exchange) (Available 24 hours a day.)
France National Poisons Control Center	ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (Available 24 hours a day.)
Hungary National Emergency Phone Number	36 80 20 11 99 (Available 24 hours a day.)
Lithuania Neatidėliotina informacija apsinuodijus	+370 5 236 20 52 or +37068753378 (Hours of operation not provided.)
Malta Accident and Emergency Department	2545 4030 (Hours of operation not provided.)
Netherlands National Poisons Information Center (NVIC)	030-274 88 88 (Only for the purpose of informing medical personnel in cases of acute intoxications)
Norway Norwegian Poison Information Center	22 59 13 00 (Available 24 hours a day.)
Portugal Poison Centre	800 250 250 (Available 24 hours a day.)
Romania Număr de telefon care poate fi apelat în caz de urgență:	021 5992300, int. 291 Spitalul Clinic de Urgență București: spital@urgentafloreasca.ro
Romania	0265 212111, 0265 211292, 0265 217235 Spitalul Clinic Județean de Urgență Târgu Mureș: secretariat@spitjudms.ro
Slovakia National Toxicological Information Centre	+421 2 5477 4166 (Available 24 hours a day.)
Sweden National Poison Information Center	112 - and ask for Poison Information (Available 24 hours a day.)
Switzerland Tox Info Suisse	145 (Available 24 hours a day.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
Health hazards		
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Propan-2-ol; Isopropyl alcohol; Isopropanol

Hazard pictograms

Signal word Danger

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

Prevention

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours.
P271	Use only outdoors or in a well-ventilated area.

Response Not assigned.

Storage

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information According to Regulation (EC) No. 648/2004 on Detergents, as amended; Contains: Aliphatic hydrcarbons 5-15%. perfumes: Hexyl Cinnamal, Hydroxycitronellal

2.3. Other hazards This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Propan-2-ol; Isopropyl alcohol; Isopropanol	30 - 60	67-63-0 200-661-7	01-2119457558-25	603-117-00-0	
Classification:	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336				
ammonia ….%	0 - 1	1336-21-6 215-647-6	01-2119982985-14	007-001-01-2	
Classification:	Acute Tox. 3;H331;(ATE: 3 mg/l), Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400, Aquatic Chronic 1;H410				B
Specific Concentration Limits:	STOT SE 3;H335: C >= 5 %				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).
ATE: Acute toxicity estimate.
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion In the unlikely event of swallowing contact a physician or poison control centre. Rinse mouth.

4.2. Most important symptoms and effects, both acute and delayed May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards Extremely flammable aerosol.

5.1. Extinguishing media

Suitable extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
For emergency responders	Keep unnecessary personnel away. Avoid breathing mist/vapours. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. This product is miscible in water. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Pressurised container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing mist/vapours. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Storage class (TRGS 510): 2B (Aerosol dispensers and lighters)
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	MAK	500 mg/m3
		200 ppm
	STEL	2000 mg/m3
		800 ppm

Belgium. Exposure Limit Values

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3
	TWA	980 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	MAC	14 mg/m3
		20 ppm
	STEL	36 mg/m3
		50 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	MAC	999 mg/m3
		400 ppm
	STEL	1250 mg/m3
		500 ppm

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	980 mg/m3
		400 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	Ceiling	36 mg/m3
	TWA	14 mg/m3
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Ceiling	1000 mg/m3
	TWA	500 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TLV	490 mg/m3
		200 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	620 mg/m3
		250 ppm
	TWA	500 mg/m3
		200 ppm

France. OELs. Occupational Exposure Limits as Prescribed by Art. R.4412-149 of Labor Code, as amended

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	VLE	14 mg/m3
		20 ppm
	VME	7 mg/m3
		10 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	VLE	980 mg/m3
Regulatory status: Indicative limit (VL)		
		400 ppm
Regulatory status: Indicative limit (VL)		

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3
		200 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	AGW	500 mg/m3
		200 ppm

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
		500 ppm
	TWA	980 mg/m3
		400 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
	TWA	14 mg/m3
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
	TWA	500 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	490 mg/m3
		200 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Italy. Occupational Exposure Limits

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
	TWA	350 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3
		20 ppm

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TLV	245 mg/m3
		100 ppm

Poland. Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1200 mg/m3
	TWA	900 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	35 ppm
	TWA	25 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
	TWA	14 mg/m3

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	500 mg/m3
		203 ppm
	TWA	200 mg/m3
		81 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
ammonia ….% (CAS 1336-21-6)	TWA	14 mg/m3
		20 ppm
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	TWA	500 mg/m3
		200 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	600 mg/m3
		250 ppm
	TWA	350 mg/m3
		150 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1000 mg/m3
		400 ppm
	TWA	500 mg/m3
		200 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	STEL	1250 mg/m3

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
		500 ppm
	TWA	999 mg/m3
		400 ppm

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	50 mg/l	Acetone	Urine	*
	50 mg/l	Acetone	Blood	*
	0,86 umol/l	Acetone	Urine	*
	0,86 umol/l	Acetone	Blood	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	430 µmol/l	Acetone	Urine	*
	25 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	40 mg/l	Acetona	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	25 mg/l	ACETON	Urine	*
	25 mg/l	ACETON	Blood	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Components	Value	Assessment factor	Notes
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Long-term, Systemic, Dermal	319 mg/kg bw/day	2	Repeated dose toxicity
Long-term, Systemic, Inhalation	89 mg/m3	2	Repeated dose toxicity
Long-term, Systemic, Oral	26 mg/kg bw/day	2	Repeated dose toxicity

Workers

Components	Value	Assessment factor	Notes
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Long-term, Systemic, Dermal	888 mg/kg bw/day	1	
Long-term, Systemic, Inhalation	500 mg/m3	1	

Predicted no effect concentrations (PNECs)

Components	Value	Assessment factor	Notes
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Freshwater	140,9 mg/l	1	
Secondary poisoning	160 mg/kg	30	Oral
Sediment (freshwater)	552 mg/kg		
Soil	28 mg/kg		

Exposure guidelines

Cyprus OEL: Skin designation

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Can be absorbed through the skin.

Hungary OELs: Skin designation

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Can be absorbed through the skin.

Iceland OELs: Skin designation

ammonia ….% (CAS 1336-21-6)	Can be absorbed through the skin.
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Can be absorbed through the skin.

Ireland Exposure Limit Values: Skin designation

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection conforming to EN 166.

Skin protection

- Hand protection When handling the product wear chemical-resistant gloves (standard EN 374). The breakthrough time of the glove should be longer than the total duration of product use. If work lasts longer than the breakthrough time, gloves should be changed part-way through. Nitrile gloves are recommended. Suitable gloves can be recommended by the glove supplier.

- Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge and full facepiece. (Filter type A)

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Form Aerosol.

Colour Colourless.

Odour Characteristic odor.

Melting point/freezing point Not available.

Boiling point or initial boiling point and boiling range 82 °C (179,6 °F)

Flammability Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 1,8 %

Explosive limit – upper (%) 12 %

Flash point	12,0 °C (53,6 °F)
Auto-ignition temperature	460 °C (860 °F)
Decomposition temperature	Not available.
pH	Not available.
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Miscible with water
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapour pressure	Not available.
Density and/or relative density	
Relative density	0,93 g/cm3 20 °C
Vapour density	Not available.
Particle characteristics	Not available.
9.2. Other information	
9.2.1. Information with regard to physical hazard classes	No relevant additional information available.
9.2.2. Other safety characteristics	
Evaporation rate	Not available.
VOC	412 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Acids. Strong oxidising agents. Chlorine. Isocyanates.
10.6. Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

11.1. Information on toxicological effects

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

Components	Species	Test Results
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)		
Acute		
Inhalation		
LC50	Rat	> 25000 mg/m3, 6 h

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
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.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

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

Specific target organ toxicity - single exposure May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Not likely, due to the form of the product.

Mixture versus substance information Not available.

11.2. Information on other hazards

Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information May cause allergic respiratory and skin reactions.

SECTION 12: Ecological information

12.1. Toxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
ammonia ….% (CAS 1336-21-6)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	101 mg/l, 96 hours
Fish	LC50	Fish	0,89 mg/l, 96 hours
Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)			
Aquatic			
Acute			
Crustacea	LC50	Brine shrimp (Artemia salina)	> 10000 mg/l, 24 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

ammonia ….%	-2,66
Propan-2-ol; Isopropyl alcohol; Isopropanol	0,05

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.
GWP: 0

Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended

ammonia ….% (CAS 1336-21-6) 0

12.8. Additional information

Estonia Dangerous substances in soil Data

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)	Chemical pesticides (As the total sum of the active substances) 0,5 mg/kg Chemical pesticides (As the total sum of the active substances) 20 mg/kg Chemical pesticides (As the total sum of the active substances) 5 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1950
14.2. UN proper shipping name	AEROSOLS, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
Label(s)	2.1
Hazard No. (ADR)	Not assigned.
Tunnel restriction code	D
ADR/RID - Classification code:	5F
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	No
ERG Code	10L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

14.1. UN number	UN1950
14.2. UN proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
Subsidiary risk	Not assigned.
14.4. Packing group	Not assigned.
14.5. Environmental hazards	
Marine pollutant	No
EmS	F-D, S-U
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments Not established.

ADR; IATA; IMDG

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

ammonia ….% (CAS 1336-21-6)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

ammonia ….% (CAS 1336-21-6)

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ammonia ….% (CAS 1336-21-6)

Propan-2-ol; Isopropyl alcohol; Isopropanol (CAS 67-63-0)

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
CAS: Chemical Abstract Service.
Ceiling: Short Term Exposure Limit Ceiling value.

CEN: European Committee for Standardization.
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
GWP: Global Warming Potential.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MAC: Maximum Allowed Concentration.
MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).
MARPOL: International Convention for the Prevention of Pollution from Ships.
PBT: Persistent, bioaccumulative and toxic.
REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TLV: Threshold Limit Value.
TWA: Time Weighted Average.
VLE: Exposure Limit Value.
VME: Exposure Average Value.
VOC: Volatile organic compounds.
vPvB: Very persistent and very bioaccumulative.
STEL: Short-term Exposure Limit.

References Not available.

Information on evaluation method leading to the classification of mixture The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements, which are not written out in full under sections 2 to 15

H225 Highly flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Revision information None.

Training information Follow training instructions when handling this material.

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