Eni i-Care Glass Clean -10° C

Safety Data Sheet

According to Regulation (EU) No. 830/2015

Date of issue: 15/10/2018 Revision date: 15/10/2018 Supersedes: 11/01/2018 Version: 1.1

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Eni i-Care Glass Clean -10° C
Product code	:	5660
Type of product	:	Detergent
Formula	:	1101-2018
Product group	:	Trade product

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

1.2.1. Relevant identified uses

Main use category	:	Professional use,Consumer use
Industrial/Professional use spec	:	Wide dispersive use
Use of the substance/mixture	:	Antifreeze fluids Cleaning/washing agents and additives ---- Do not use the product for any purposes that have not been advised by the manufacturer.
Function or use category	:	Anti-freezing agents, Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ENI S.p.A.

P.le E. Mattei 1 - 00144 Rome Italy

Phone: (+39) 06 59821

www.eni.com

Contact:

Refining & Marketing

Competent person responsible for the Safety Data Sheet (Reg. EC nr. 1907/2006): SDSInfo@eni.com

1.4. Emergency telephone number

Emergency number	:	CNIT +39 0382 24444 (24h) (IT + EN) Poison centre (UK): National Poisons Information Service Edinburgh (24h) (+44) 844 892 0111 0870 600 6266 (UK only) (Source: UN-WHO)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]

Flammable liquids, Category 3	H226
Serious eye damage/eye irritation, Category 2	H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes eye irritation. For specific information about the toxicological/ecotoxicological properties and classification of this product, see Sect. 11 and/or Sect. 12.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS02 GHS07

CLP Signal word : Warning

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves, eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use carbon dioxide (CO2), dry extinguishing powder, alcohol resistant foam to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents and container to according to national or local regulations.

2.3. Other hazards (not relevant for classification)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [EU-GHS / CLP]
Ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	20 - 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Propan-2-ol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25	5 - 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If the casualty is breathing: Remove to fresh air, keep the casualty warm and at rest. Place in the recovery position. Administer oxygen if necessary. If casualty is unconscious and not breathing: ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical advice.

First-aid measures after skin contact : Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice. If there are signs of frostbite, (blanching or redness of skin or burning or tingling sensation), do not rub, massage or compress the affected area. Obtain medical advice from a specialist.

First-aid measures after eye contact : Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart. If irritation persists, seek medical advice.

First-aid measures after ingestion : Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is inconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs. Do not give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation	:	Overexposure to vapours (e.g. through prolonged use in confined, insufficiently ventilated spaces) may cause irritation to airways, nausea and dizziness.
Symptoms/effects after skin contact	:	Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with the liquid the may cause cold burns/frostbite.
Symptoms/effects after eye contact	:	Contact with eyes may cause a light transient irritation.
Symptoms/effects after ingestion	:	Accidental ingestion of small quantities of the product may cause irritation, nausea and gastric disturbances. Taking into account the taste of the product, however, ingestion of dangerous quantites is very unlikely.
Symptoms/effects upon intravenous administration	:	No information available.
Chronic symptoms	:	None to be reported, according to the present classification criteria.

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

Treat symptomatically. Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Other extinguishing gases (according to regulations).
Unsuitable extinguishing media	:	Do not use water jets. They could cause splattering, and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Use water stream to cool containers.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Flammable liquid and vapour. Avoid accidental sprays on hot surfaces or electrical contacts.
Explosion hazard	:	The vapours are flammable and may form explosive mixtures with air. Heat may build pressure in tank and containers, rupturing closed vessels, spreading fire and increasing risk of burns and injuries.

5.3. Advice for firefighters

Firefighting instructions	:	Move undamaged containers from immediate hazard area if it can be done safely. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.
Special protective equipment for firefighters	:	Personal protection equipment for firefighters (see also sect. 8). EN 443. EN 469. EN 659. Self-contained breathing apparatus.
Other information	:	In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Stop or contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material. Keep upwind.

6.1.1. For non-emergency personnel

Protective equipment	:	See Section 8.
Emergency procedures	:	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.

6.1.2. For emergency responders

Protective equipment	:	Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves (preferably gauntlets) providing adequate chemical resistance. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Antistatic non-skid safety shoes or boots, chemical resistant. Work helmet. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection: a half or full-face respirator with filter(s) for organic vapours (AX), or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
Emergency procedures	:	Notify local authorities according to relevant regulations.

6.2. Environmental precautions

Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

For containment : Contain spilled liquid with sand, earth or other suitable absorbents (non-flammable). Recover free liquid and waste materials in suitable waterproof and oil-resistant containers. Clean contaminated area. Dispose of according to local regulations. Large spillages may be cautiously covered with foam, if available, to limit fire risk. When inside buildings or confined spaces, ensure adequate ventilation. If in water: This product is soluble in water, and usually no special measures are feasible. If possible, collect spilled product with mechanical means. Notify official Authorities when required. Dispose of in accordance with relevant local regulations. Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities.

Other information : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air/water temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. Before commencing any operation in a confined area (e.g. tunnels), check the atmosphere for oxygen content and flammability. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Do not breathe vapours.

Hygiene measures : Avoid contact with skin. Use adequate personal protective equipment as needed. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Do not re-use clothes, if they are still contaminated.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well ventilated area. Store the bottle in upright position in a dark and cool place. Do not smoke. Keep away from open flames, hot surfaces and sources of ignition. Vapours are heavier than air and spread above ground. Beware of accumulation in pits and confined spaces.

Incompatible products : Keep away from: strong oxidants.

Storage area : Storage area layout, electrical equipment and wiring must comply with the relevant safety regulations, according to the specific risk rating of the area. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.

Packages and containers: : Keep containers tightly closed and properly labelled. Empty containers may contain combustible product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethanol (64-17-5)		
Austria	MAK (ppm)	1000 ppm
Austria	MAK Short time value (ppm)	2000 ppm
Belgium	Limit value (ppm)	1000 ppm
Denmark	Grænseværdi (langvarig) (ppm)	1000 ppm
Denmark	Grænseværdi (kortvarig) (ppm)	2000 ppm
France	VME (ppm)	5000 ppm
France	VLE (ppm)	1000 ppm
Germany	TRGS 900 Occupational exposure limit value (ppm)	500 ppm
Germany	TRGS 900 Limitation of exposure peaks (ppm)	1000 ppm
Hungary	CK-érték	1900 mg/m³
Hungary	MK-érték	7600 mg/m³
Netherlands	MAC TGG 8h (mg/m³)	260 mg/m³
Poland	NDSCh (mg/m³)	1900 mg/m³
Spain	VLA-ED (ppm)	1000 ppm

Ethanol (64-17-5)		
Sweden	Nivågränsvärde (NVG) (ppm)	500 ppm
Sweden	Kortidsvärde (KTV) (ppm)	1000 ppm
United Kingdom	WEL TWA (ppm)	1000 ppm
Switzerland	MAK (ppm)	500 ppm
Switzerland	VLE (ppm)	1000 ppm
Canada (Quebec)	VECD (ppm)	1000 ppm
USA - ACGIH	ACGIH TLV®-STEL (ppm)	1000 ppm ACGIH 2015
Propan-2-ol (67-63-0)		
Austria	MAK (mg/m³)	500 mg/m³
Austria	MAK (ppm)	200 ppm
Austria	MAK Short time value (mg/m³)	2000 mg/m³
Austria	MAK Short time value (ppm)	800 ppm
Belgium	Limit value (mg/m³)	500 mg/m³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m³)	1000 mg/m³
Belgium	Short time value (ppm)	400 ppm
Denmark	Grænseværdi (langvarig) (mg/m³)	490 mg/m³
Denmark	Grænseværdi (langvarig) (ppm)	200 ppm
Denmark	Grænseværdi (kortvarig) (mg/m³)	980 mg/m³
Denmark	Grænseværdi (kortvarig) (ppm)	400 ppm
Finland	HTP-arvo (8h) (mg/m³)	500 mg/m³
Finland	HTP-arvo (8h) (ppm)	200 ppm
Finland	HTP-arvo (15 min) (mg/m³)	620 mg/m³
Finland	HTP-arvo (15 min) (ppm)	250 ppm
France	VLE (mg/m³)	980 mg/m³
France	VLE (ppm)	400 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	500 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	200 ppm
Germany	TRGS 900 Limitation of exposure peaks (mg/m³)	1000 mg/m³
Germany	TRGS 900 Limitation of exposure peaks (ppm)	400 ppm
Hungary	AK-érték	500 mg/m³
Hungary	CK-érték	2000 mg/m³
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Latvia	OEL TWA (mg/m³)	350 mg/m³
Latvia	OEL STEL (mg/m³)	600 mg/m³
Poland	NDS (mg/m³)	900 mg/m³
Poland	NDSCh (mg/m³)	1200 mg/m³
Spain	VLA-ED (mg/m³)	500 mg/m³
Spain	VLA-ED (ppm)	200 ppm
Spain	VLA-EC (mg/m³)	1000 mg/m³
Spain	VLA-EC (ppm)	400 ppm
Sweden	Nivågränsvärde (NVG) (mg/m3)	350 mg/m³
Sweden	Nivågränsvärde (NVG) (ppm)	150 ppm
Sweden	Kortidsvärde (KTV) (mg/m3)	600 mg/m³
Sweden	Kortidsvärde (KTV) (ppm)	250 ppm
United Kingdom	WEL TWA (mg/m³)	999 mg/m³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1250 mg/m³
United Kingdom	WEL STEL (ppm)	500 ppm
Switzerland	MAK (mg/m³)	500 mg/m³
Switzerland	MAK (ppm)	200 ppm
Switzerland	VLE (mg/m³)	1000 mg/m³

Propan-2-ol (67-63-0)		
Switzerland	VLE (ppm)	400 ppm
Canada (Quebec)	VECD (ppm)	400 ppm
Canada (Quebec)	VEMP (ppm)	500 ppm
USA - ACGIH	ACGIH TLV®-TWA (ppm)	200 ppm
USA - ACGIH	ACGIH TLV®-STEL (ppm)	400 ppm
USA - NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA - NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA - OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Monitoring methods	
Monitoring methods	Monitoring procedures should be chosen according to the indications set by national authorities or labour contracts,Refer to relevant legislation and in any case to the good practice of industrial hygiene.

Eni i-Care Glass Clean -10° C	
DNEL/DMEL (additional information)	
Additional information	Not applicable
PNEC (additional information)	
Additional information	Not applicable

Note : The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

8.2. Exposure controls

Appropriate engineering controls:

Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content and flammability.

Personal protective equipment (for industrial or professional use):

Safety glasses. Protective clothing. Gloves. Safety shoes or boots.

Hand protection:

Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard. Adequate materials: nitrile (NBR) or neoprene with a protection index ≥ 5 (permeation time ≥ 240 mins). Personal hygiene is a key element for an effective hand care. Gloves must be worn only with clean hands. After wearing gloves, hands must be carefully washed and dried.

Eye protection:

When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.

Skin and body protection:

Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant.

Respiratory protection:

Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: if the product is handled without adequate containment: use full or half-face masks with adequate filter for mists and organic vapours. (EN 136/140/145). Combination filter device (DIN EN 141). Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145)

Personal protective equipment symbol(s):

Thermal hazard protection:

None in normal use conditions.

Environmental exposure controls:

Do not discharge the product into the environment. Prevent discharge of undissolved substance to or recover from onsite wastewater. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Consumer exposure controls:

Ensure adequate ventilation. Avoid excessive or improper use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid, bright & clear.
Molecular mass	:	Not applicable for mixtures
Colour	:	Light blue.
Odour	:	Alcohol.
Odour threshold	:	There are no data available on the preparation/mixture itself.
pH	:	8,9
Relative evaporation rate (butylacetate=1)	:	Not determined
Melting point	:	No data available
Freezing point	:	-10 °C (ASTM D 1177)
Boiling point	:	> 81 °C
Flash point	:	< 60 °C (ASTM D 92)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	Water: Dispersible in water
Log Pow	:	Not applicable for mixtures
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	None.
Oxidising properties	:	None.
Explosive limits	:	No data available

9.2. Other information

Additional information : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

This mixture does not offer any further hazard for reactivity, except what is reported in the following paragraphs.

10.2. Chemical stability

Stable product, according to its intrinsic properties (in normal conditions of storage and handling).

10.3. Possibility of hazardous reactions

None (in normal conditions of storage and handling). Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

10.4. Conditions to avoid

Keep away from strong oxidizers. Keep away from open flames, hot surfaces and sources of ignition. Avoid the build-up of electrostatic charge.

10.5. Incompatible materials

Strong oxidants. Acids. Acid anhydrides. Halogenated compounds. Aluminium.

10.6. Hazardous decomposition products

Thermal decomposition generates : Toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)

Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight OECD Guideline 401
LD50 dermal rabbit	> 15800 mg/kg bodyweight
LC50 inhalation rat (mg/l)	51 mg/l 6h - OECD Guideline 403

Propan-2-ol (67-63-0)	
LD50 oral rat	4700 mg/kg
LD50 dermal rat	≥ 2000 mg/kg
LC50 inhalation rat (mg/l)	46 mg/l/4h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 8,9
Additional information : (according to composition)
Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect.
Serious eye damage/irritation : Causes serious eye irritation.
pH: 8,9
Additional information : (according to composition)
Vapours may cause eye irritation
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
High concentration of vapours may induce: headache, nausea, dizziness
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)

Ethanol (64-17-5)	
NOAEL (subchronic, oral, animal/male, 90 days)	3250 mg/kg bodyweight EPA OPPTS

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)
Additional information : (according to composition)
Potential adverse human health effects and symptoms : Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with eyes may cause temporary reddening and irritation.
Other information : None.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (air, soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment.
Ecology - air : This product has a low vapour pressure. A significant exposure may happen only if the product is used at high temperature, or in case of sprays and mists.
Ecology - water : Dispersible in water
Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

ethanol; ethyl alcohol (64-17-5)	
LC50 fish 1	14,2 mg/l (96h - US EPA E03-05 - Pimephales promelas - 1984)
LC50 fish 2	11200 mg/l (24h - US EPA E03-05 - Oncorhynchus mykiss)
LC50 other aquatic organisms 1	0,1 - 1 mg/l (48h - Eisenia fetida)
EC50 Daphnia 1	5012 mg/l (48h - LC50 - ASTM E729-80)
EC50 other aquatic organisms 1	5,8 g/l 4h
EC50 72h algae (1)	275 mg/l (Chlorella vulgaris - OECD Guideline 201)
EC50 96h algae (1)	1000 mg/l (Chlorella vulgaris - OECD Guideline 201)
ErC50 (algae)	22,6 mg/l (10d)
NOEC chronic fish	250 mg/l 5 days
NOEC chronic crustacea	9,6 mg/l 10 days
NOEC chronic algae	280 mg/l 7 days

Propan-2-ol (67-63-0)	
LC50 fish 1	9640 mg/l (OECD 203; 96h, Pimephales promelas)
EC50 Daphnia 1	2285 - 13899 mg/l (OECD 202; 24h)

12.2. Persistence and degradability

Eni i-Care Glass Clean -10° C	
Persistence and degradability	No data available.

ethanol; ethyl alcohol (64-17-5)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1067 - 1236 g O_2/g substance
Chemical oxygen demand (COD)	1,99 g O_2/g substance

Propan-2-ol (67-63-0)	
Biochemical oxygen demand (BOD)	1,19 - 1,72 g O_2/g substance (5 d)
Chemical oxygen demand (COD)	2,23 g O_2/g substance (5 d)
Biodegradation	53 % (5 d)

12.3. Bioaccumulative potential

Eni i-Care Glass Clean -10° C	
Log Pow	Not applicable for mixtures
Bioaccumulative potential	Not established.

ethanol; ethyl alcohol (64-17-5)	
Bioconcentration factor (BCF REACH)	3,2
Log Pow	-0,35 at 20°C
Bioaccumulative potential	Low bioaccumulation potential.

12.4. Mobility in soil

Eni i-Care Glass Clean -10° C	
Ecology - soil	No data available.

ethanol; ethyl alcohol (64-17-5)	
Log Koc	2,75
Ecology - soil	Small adsorption.

12.5. Results of PBT and vPvB assessment

Eni i-Care Glass Clean -10° C	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Results of PBT-vPvB assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Component	
ethanol; ethyl alcohol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of empty containers and wastes safely. Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

Sewage disposal recommendations : Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Dispose of in a safe manner in accordance with local/national regulations.

Product/Packaging disposal recommendations : European Waste Catalogue code(s) (Decision 2001/118/CE): 16 01 14* (antifreeze fluids containing dangerous substances). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations.

Additional information : Empty containers may contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.

Ecology - waste materials : The product as it is does not contain halogenated substances.

EURAL code (EWC) : 16 01 14* - antifreeze fluids containing dangerous substances

SECTION 14: Transport information

In accordance with ADN / ADR / IATA / IMDG / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1993	1993	1993	1993	1993
14.2. UN proper shipping name				
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Transport document description				
UN 1993 FLAMMABLE LIQUID, N.O.S. (Isopropanol, Ethanol), 3, III, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III	UN 1993 Flammable liquid, n.o.s., 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, III
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
None.				

14.6. Special precautions for user

- Overland transport

Transport regulations (ADR) : Subject to the provisions

Classification code (UN) : F1

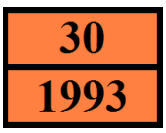
Limited quantities (ADR) : 5l

Excepted quantities (ADR) : E1

Transport category (ADR) : 3

Hazard identification number (Kemler No.) : 30

Orange plates :



Tunnel restriction code : D/E

- Transport by sea

Transport regulations (IMDG) : Subject to the provisions

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG)	:	E1
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-E
Stowage category (IMDG)	:	A

- Air transport

Transport regulations (IATA)	:	Subject to the provisions
PCA Excepted quantities (IATA)	:	E1
PCA limited quantity max net quantity (IATA)	:	10L
PCA max net quantity (IATA)	:	60L

- Inland waterway transport

Transport regulations (ADN)	:	Subject to the provisions
Classification code (ADN)	:	F1
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1

- Rail transport

Transport regulations (RID)	:	Subject to the provisions
Classification code (RID)	:	F1
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Transport category (RID)	:	3
Hazard identification number (RID)	:	30

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

IBC code : Not available.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Propan-2-ol
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Propan-2-ol - Ethanol
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Propan-2-ol - Ethanol
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Propan-2-ol

No ingredients are included in the REACH Candidate list (> 0,1 % m/m).

Contains no REACH Annex XIV substances

CESIO recommendations : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Detergent Regulation : Ingredient data sheet:

Component	CAS-No.	%
Ethanol	64-17-5	>=10%
Propan-2-ol	67-63-0	1 - 10%

15.1.2. National regulations

National adoption of EU Directives concerning health and safety on the workplace.
National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (2012/18/CE). (annex I, part 1)

Relevant national laws on prevention of water pollution.
Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC).
National adoption of Directives 75/439/CEE - 87/101/CEE concerning disposal of used oils.

Germany

Reference to AwSV	:	Water hazard class (WGK) (D) 1, low hazard to water (Classification according to AwSV, Annex 1)
WGK remark	:	Classification based on the R-phrases in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS)
VbF class (D)	:	A II - Liquids with a flashpoint between 21°C and 55°C
Storage class (LGK) (D)	:	LGK 3 - Flammable liquids
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Saneringsinspanningen	:	C - Minimize discharge
SZW-lijst van kankerverwekkende stoffen	:	ethanol; ethyl alcohol is listed
SZW-lijst van mutagene stoffen	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	ethanol; ethyl alcohol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	ethanol; ethyl alcohol is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	ethanol; ethyl alcohol is listed

Denmark

Class for fire hazard	:	Class III-1
Store unit	:	50 liter
Classification remarks	:	Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been not carried out

A chemical safety assessment has been carried out for the following components of this mixture:
Ethanol Propan-2-ol

SECTION 16: Other information

Indication of changes:
Label elements.

Abbreviations and acronyms:

	Complete text of the H phrases quoted in this Safety Data Sheet. These phrases are reported here for information only, and MAY NOT correspond to the classification of the product.
	N/A = not applicable
	N/D = not available
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Effective concentration for 50 percent of test population (median effective concentration)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)
LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development

PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Data sources : This Safety Data Sheet is based on the characteristics of the component(s), according to the information provided by the supplier(s).

Training advice : Provide adequate training to professional operators for the use of PPEs, according to the information contained in this Safety Data Sheet.

Other information : Do not use the product for any purposes that have not been advised by the manufacturer.

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 3	H226	On basis of test data:
Eye Irrit. 2	H319	Calculation method

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product