



MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS # : 32127

COOLELF SUPRA

Date of the previous version: 2010-12-28

Revision Date: 2012-10-05

Version 1.01

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	COOLELF SUPRA
Number	EKN
Pure substance/mixture	Mixture

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

Identified uses	Antifreeze, Coolant.
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1.3. Details of the supplier of the safety data sheet

Supplier	TOTAL LUBRIFIANTS 562 Avenue du Parc de L'île 92029 Nanterre Cedex Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71
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For further information, please contact:

Contact Point	HSE
E-mail Address	rm.msds-lubs@total.com

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
 France - ORFILA (INRS) Tél : +33 (0)1 45 42 59 59
 In France : - PARIS : Hôpital Fernand Widal 200, rue du Faubourg Saint-Denis 75475 Paris Cédex 10 , Tel : 01.40.05.48.48. -
 MARSEILLE : Hopital Salvator, 249 bd Ste Marguerite 13274 Marseille cedex 5, Tel : 04.91.75.25.25. - LYON : Hopital Edouard
 Herriot, 5 place d'Arsonvol, 69437 Lyon cedex 3, Tel : 04.72.11.69.11. - NANCY : Hopital central, 29 Av du Mal De Lattre de
 Tassigny, 54000 Nancy, Tel : 03.83.32.36.36 ou le SAMU : Tel (15)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16



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The substance/mixture is classified as dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)

Xn - Harmful

Classification

Xn;R22

2.2. Label elements

Labelled according to

Directive 1999/45/EC



Xn - Harmful

Contains Glycol

R-phrase(s)

R22 - Harmful if swallowed

S-phrase(s)

S 2 - Keep out of the reach of children

S46 - If swallowed, seek medical advice immediately and show this container or label

S36/37 - Wear suitable protective clothing and gloves

2.3. Other hazards**Physical-Chemical Properties**

Vapors may form explosive mixtures with air.

Environmental properties

Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS3.2. Mixture

Chemical Name	EC-No	REACH registration No	CAS-No	Weight %	Classification (Dir. 67/548)	Classification (Reg. 1272/2008)
Glycol	203-473-3	no data available	107-21-1	30-60	Xn; R22	Acute Tox. 4 (H302)



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Additional information Product with ethylene-glycol base. Accidental ingestion may be harmful to the central nervous system. This product contains an approved repellent (bitter), for the purpose of avoiding the risk of accidental ingestion. If overheated, the product may release flammable vapors that can form explosive gas mixtures.

For the full text of the R-phrases mentioned in this Section, see Section 16
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. Description of first-aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE. Show this material safety data sheet to the doctor in attendance.***
Eye contact	Check for and remove any contact lenses. Rinse thoroughly with plenty of water, also under the eyelids.***
Skin contact	Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse.***
Inhalation	Move to fresh air. If breathing difficult. Consult a physician.***
Ingestion	Do NOT induce vomiting. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.***

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

Eye contact	Not classified.***
Skin contact	Not classified.***
Inhalation	Not classified. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.***
Ingestion	Harmful if swallowed. Ingestion constitutes the main danger because of the toxicity of ethylene glycol. Accidental ingestion may be harmful to the central nervous system. Ingestion is followed first by digestive disorders (nausea, vomiting, abdominal pain), then by loss of muscular coordination, convulsions, headaches, and dizzy spells, preceding serious nervous disorders. This develops into a state of torpor and then coma, at times accompanied by convulsions. Intoxication can lead to a coma with metabolic acidosis that may be fatal.***

4.3. Indication of immediate medical attention and special treatment needed, if necessary



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Notes to physician

Ingestion, depending on the dose, can cause i.a. abnormal behaviour, unconsciousness, convulsions, respiratory paralysis, pulmonary oedemas, as well as damages to liver and kidneys and can lead, in the worst case, to death. A quick treatment of an ethylene-glycol intoxication, when necessary with haemodialysis, may reduce the toxic effects. Intravenous ethyl alcohol in sodium bicarbonate solution is an approved antitoxin. Rinse mouth.***

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray. Dry chemical powder. Carbon dioxide (CO₂). Foam.***

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special Hazard

Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.***

5.3. Advice for fire-fighters

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Other information

Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.***

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Information

Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.***

6.2. Environmental precautions

General Information

Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.***

6.3. Methods and materials for containment and cleaning up



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Methods for cleaning up

Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.***

6.4. Reference to other sections

Personal Protective Equipment See Section 8 for more detail.

Waste treatment See section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Never pierce, drill, grind, cut, saw or weld any empty container.***

Hygiene measures

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.***

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Keep in a banded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Protect from frost, heat and sunlight. Protect from moisture.***

Materials to Avoid

Strong oxidizing agents. Strong acids.***

7.3. Specific end uses

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

Ingredients with workplace control parameters

Chemical Name	European Union
Glycol 107-21-1	TWA 20 ppm TWA 52 mg/m ³ STEL 40 ppm STEL 104 mg/m ³ S*



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Legend See section 16

8.2. Exposure controls

Occupational Exposure Controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.***

Personal Protective Equipment

General Information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.***

Respiratory protection

None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***

Eye Protection

If splashes are likely to occur, wear: Safety glasses with side-shields.***

Skin and body protection

Wear suitable protective clothing. Impervious gloves. Protective shoes or boots. Long sleeved clothing.***

Hand Protection

Rubber gloves, Nitrile rubber. Neoprene gloves, Polyvinylchloride. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.***

Environmental exposure controls

General Information

Do not allow material to contaminate ground water system.***

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	limpid
Color	yellow
Physical State @20°C	liquid
Odor	Slight

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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pH	7.8 - 8.6		ASTM D 1287
Boiling point/boiling range		No information available	
Flash point		Not applicable	
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Density	1053 - 1063 kg/m ³	@ 20 °C	ASTM D 5931
Water solubility		soluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		Not applicable	
Viscosity, kinematic		No information available	
Explosive properties	May form explosive mixtures with air		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
<u>9.2. Other information</u>			
Freezing Point	-25 °C -13 °F		ASTM D 1177 ASTM D 1177

10. STABILITY AND REACTIVITY

10.1. Reactivity10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions None under normal processing.

10.4. Conditions to Avoid

Conditions to Avoid Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Take precautionary measures against static discharges.

10.5. Incompatible Materials

Materials to Avoid Strong oxidizing agents. Strong acids.***

10.6. Hazardous Decomposition Products



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Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Acetaldehyde at temperatures around 500 - 600 °C.

11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity Local effects Product Information**

Skin contact	Not classified. Not classified.***
Eye contact	Not classified. Not classified.***
Inhalation	Not classified. Not classified. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.***
Ingestion	. Harmful if swallowed. Ingestion constitutes the main danger because of the toxicity of ethylene glycol. Accidental ingestion may be harmful to the central nervous system. Ingestion is followed first by digestive disorders (nausea, vomiting, abdominal pain), then by loss of muscular coordination, convulsions, headaches, and dizzy spells, preceding serious nervous disorders. This develops into a state of torpor and then coma, at times accompanied by convulsions. Intoxication can lead to a coma with metabolic acidosis that may be fatal.***

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycol	LD50 4700 mg/kg Oral (Rat)***	LD50 10600mg/kg Dermal (Rabbit)***	

Sensitization

Sensitization No sensitization responses were observed.

Specific effects

Carcinogenicity This product is not classified carcinogenic.
Mutagenicity None known.
Reproductive toxicity This product does not present any known or suspected reproductive hazards.
Repeated Dose Toxicity

Subchronic toxicity No information available.

Target Organ Effects (STOT)

Target Organ Effects (STOT) Central nervous system (CNS). Respiratory system.



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Other information**12. ECOLOGICAL INFORMATION****12.1. Toxicity****Acute aquatic toxicity - Product Information**

No information available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
Glycol 107-21-1	EC50 (96h) 6500 - 13000 mg/L Pseudokirchneriella subcapitata	LC50(48h) 41000 mg/l***	LC50 (96h) = 16000 mg/L Poecilia reticulata (static) LC50 (96h) = 40000 - 60000 mg/L Pimephales promelas (static) LC50 (96h) = 40761 mg/L Oncorhynchus mykiss (static) LC50 (96h) = 14 - 18 mL/L Oncorhynchus mykiss (static) LC50 (96h) = 27540 mg/L Lepomis macrochirus (static) LC50 (96h) = 41000 mg/L Oncorhynchus mykiss ()	EC50 = 620 mg/L 30 min EC50 = 10000 mg/L 16 h EC50 = 620.0 mg/L 30 min

Chronic aquatic toxicity - Product Information

No information available.

Chronic aquatic toxicity - Component Information

No information available.

Effects on terrestrial organisms

No information available.

12.2. Persistence and degradability**General Information**

Product is biodegradable. Based on compositional information available and measured or predicted data on key constituents.

12.3. Bioaccumulative potential**Product Information** No information available.**logPow** No information available**Component Information**

Chemical Name	log Pow
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Glycol - 107-21-1	-1.36***
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12.4. Mobility in soil

Soil Given its physical and chemical characteristics, the product is generally mobile in the ground.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

General Information No information available.

13. DISPOSAL CONSIDERATIONS13.1. Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with the European Directives on waste and hazardous waste. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

EWC Waste Disposal No. The following Waste Codes are only suggestions: 16 01 14.

Other information According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated

ADN Not regulated

15. REGULATORY INFORMATION



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

European Union

International Inventories

EINECS/ELINCS	Complies
TSCA	Complies
DSL	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	Complies
NZIoC	-

Legend**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals

Further information

15.2. Chemical Safety Assessment**Chemical Safety Assessment** No information available**16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R22 - Harmful if swallowed

Full text of H-Statements referred to under section 2 and 3

H302 - Harmful if swallowed

Abbreviations, acronyms

Legend Section 8

+

Sensitizer

*

Skin designation



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**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

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Revision Note *** Indicates updated section.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the safety data sheet