Safety data sheet
complying with Regulation 1907/2006/EC (REACH Regulation), EU 2020/878 and Regulation No 1272/2008/EC (CLP)

Printing date 03.11.2021 **Version number 2 (replaces version 1)** **Revision: 03.11.2021**

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

1.1 Product identifier

Trade name: ANTIFREEZER KL539 (ETHYLENE GLYCOL -15 o C SOLUTION)
UFI: MK20-E0YA-300H-P37X

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture: Antifreeze for closed water circuits

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Kalogeropoulos Chemicals S.A.
D. Gounari 35, 185 31
Pireaus, Greece
Tel: +30 2104124518
Fax: +30 2104101607
e-mail: info@kalochem.gr
website: www.kalochem.gr

1.4 Emergency telephone number:

European Emergency Tel.: 112

*
SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation EC No 1272/2008 CLP:

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

2.2 Label elements
Labelling according to Regulation EC No 1272/2008 CLP:
The product is classified and labelled according to the CLP regulation.
Hazard pictograms:

GHS07

Signal word: Warning

Hazard-determining components of labelling:
ethanediol

Hazard statements:
H302 Harmful if swallowed.

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Precautionary statements
P102 Keep out of reach of children.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash thoroughly after handling.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture: consisting of the following components.

Ingredients according Regulation (EU) 2020/878:			
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1 Reg.nr.: 01-2119456816-28-XXXX	ethanediol	Acute Tox. 4, H302	25-50%
CAS: 3164-85-0 EINECS: 221-625-7	Potassium 2-ethylhexanoate	Repr. 2, H361d	≥0.4-≤0.5%
CAS: 19766-89-3 EINECS: 243-283-8	Sodium-2-ethylhexanoate	Repr. 2, H361d	≥0.1-<0.2%

SECTION 4: First aid measures

4.1 Description of first aid measures
General information: Take affected persons out into the fresh air.
After inhalation: Seek medical treatment in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly.
In case of skin irritation, consult a physician.
After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove contact lenses and continue rinsing for several minutes
If symptoms persist, consult a doctor.
Avoid strong water jet-risk of cornea damage, consult a doctor.
After swallowing:
Drink plenty of water and provide fresh air. Call for a doctor immediately.
Seek immediate medical advice.
Never give anything by mouth to an unconscious person.
Call a poison control center or a doctor if you feel unwell.
4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

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4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray.
Use fire extinguishing methods suitable to surrounding conditions.
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment:
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Keep unprotected persons away.
Avoid contact with the skin, eyes and clothing.
Avoid inhalation of vapors.
6.1.1 For non-emergency personnel Avoid contact with dripping or leaking material
6.1.2 For emergency responders
First-aid responders must wear protectice clothing, gloves, goggles and respiratory device with filter type A.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust, silica gel).
Dispose contaminated material as waste according to item 13.
6.4 Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling
Do not eat, drink or smoke during the usage of the product.
Avoid contact with skin, eyes and clothing.
Ensure good ventilation.
Wear suitable protective equipment.
Observe the general safety regulations when handling chemicals.
If ingested, seek medical advice immediately and show the container or the label.
Information about fire - and explosion protection: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities
Storage: Keep containers tightly closed in a dry, cool, well-ventilated area.
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility:
Not required.
Store away from strong oxidizing agents.

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Further information about storage conditions: Keep away from children
7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 107-21-1 ethanediol	
WEL (Great Britain)	Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm Sk *particulate **vapour
IOELV (EU)	Short-term value: 104 mg/m³, 40 ppm Long-term value: 52 mg/m³, 20 ppm Skin

DNELs
Ethylene glycol - cas number: 107-21-1.
workers:
Long-term systemic effects-skin: 106 mg/kg bw/day
Long-term local effects-inhalation: 35 mg/m³
Consumers:
Long-term systemic effects-skin: 53 mg/kg bw/day
Long-term local effects-inhalation: 7 mg/m³
PNECs
(CAS: 107-21-1) ethylene glycol
Freshwater: 10 mg/l
Marine water: 1 mg/l
Intermittent releases: 10 mg/l
Sewage Treatment Plant: 199.5 mg/l
Freshwater sediment: 37 mg/kg
Soil: 1.53 mg/kg
Marine water sediment: 3.7 mg/kg

8.2 Exposure controls

8.2.1. Appropriate engineering controls
Take appropriate protective measures with regard to the handling of chemicals and mixtures.

Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Ensure adequate ventilation during use.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while using the product.
Keep away from foodstuffs, beverages and feed.
Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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Hand protection

chemical resistant gloves (tested according to EN 374). Carefully select chemical protective gloves in accordance with the concentration and amount of the hazardous substances and according to their area of use.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Penetration time of glove material
The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
Eye/face protection

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Chemically resistant, protective work clothing (EN 14605) and boots.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Liquid
Colour:	Green
Odour:	Characteristic
Odour threshold:	Not determined
Flammability	Not applicable
Lower and upper explosion limit	
Lower:	Not determined
Upper:	Not determined
Flash point:	Not Flammable
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined
pH at 20 °C	8-9
Viscosity:	
Kinematic viscosity	Not determined
Kinematic viscosity	
Dynamic:	Not determined
Solubility	
water:	Not determined
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure:	Not determined

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Density and/or relative density	
Density at 20 °C:	1.04-1.06 g/cm³
Relative density	Not determined
Vapour density	Not determined
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Auto-ignition temperature:	Not determined
Explosive properties:	Product does not present an explosion hazard.
Cloud point / clarification point:	
Oxidising properties	Not oxidising
Evaporation rate	Not determined
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity Stable under normal conditions
10.2 Chemical stability Material is stable under normal conditions.
Thermal decomposition / conditions to be avoided Stable at environment temperature.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid
Keep away from heat, hot surfaces, sparks, naked flames and other sources of ignition. Do not smoke Safe use: see section 7
10.5 Incompatible materials Strong oxidizing agents
10.6 Hazardous decomposition products No dangerous decomposition products known.

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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Harmful if swallowed.

LD/LC50 values relevant for classification:		
ATE (Acute Toxicity Estimates)		
Oral	LD50	1,645 mg/kg (rat)

CAS: 107-21-1 ethanediol		
Oral	LD50	500 mg/kg (rat)
	ATEmix	500 mg/kg
Dermal	LD50	>3,500 mg/kg (rabbit)

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or 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.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
Additional toxicological information:
Repeated dose toxicity Based on available data, the classification criteria are not met.
11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

*
SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
(CAS: 107-21-1) ethylene glycol
Fish toxicity:
LC50 (96 h): 72,860 mg/l, Pimephales promelas (EPA 72-1, static)
Aquatic invertebrates:
EC50 (48 h): > 100 mg/l, Daphnia magna (OECD 202, Part 1, static)
Aquatic plants:
EC50 (96 h): 6,500 - 13,000 mg/l (growth rate), Pseudokirchneriella subcapitata (Algae growth inhibition test)
Microorganisms/Effect on activated sludge:
EC20 (30 min): > 1,995 mg/l, activated sludge, urban origin (DIN EN ISO 8192, aerobic)
The product has not been tested. This statement is derived from substances / products of a similar form or composition.
Chronic fish toxicity:
NOEC (7 d): 15,380 mg/l, Pimephales promelas (Screening test, semi-static)
Chronic aquatic invertebrates toxicity:
NOEC (7 d): 8,590 mg/l, Ceriodaphnia sp. (Cronic toxicity to Daphnia, semi-static)

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12.2 Persistence and degradability
(CAS: 107-21-1) Ethylene glycol
Easily biodegradable.
90-100% (Experimental data) (OECD 301A)
12.3 Bioaccumulative potential
(CAS: 107-21-1) Ethylene glycol
Partition coefficient n-octanol / water: -1.93
Bioaccumulative capacity: Not bioaccumulative
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
12.7 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation

Dispose according to National Regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number **ADR, ADN, IMDG, IATA**	Void
14.2 UN proper shipping name **ADR, ADN, IMDG, IATA**	Void
14.3 Transport hazard class(es) **ADR, ADN, IMDG, IATA** **Class**	Void
14.4 Packing group **ADR, IMDG, IATA**	Void
14.5 Environmental hazards:	Not applicable.

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14.6 Special precautions for user	Not applicable.
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
UN "Model Regulation":	Void

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH Regulation 1907/2006/EC
Regulation (EU) 2020/878
CLP Regulation 1272/2008/EC
Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.
Council Directive 94/33/EC on the protection of young people at work, as ammended.
Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations:

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57
It doesn't contain substances of very high concern (SVHC).

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Relevant phrases
H302 Harmful if swallowed.
H361d Suspected of damaging the unborn child.
Training hints
Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

Department issuing SDS:

SUSTCHEM S.A.
REACH & Chemical Services Department
A: 144, 3rd Septemvriou, GR 112 51 | Athens, Greece
T: +30 210 8252510 | F: +30 210 8252575
W: www.sustchem.gr | E: info@suschem.gr

Version number of previous version: 1
Abbreviations and acronyms:
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

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GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Repr. 2: Reproductive toxicity – Category 2
*** Data compared to the previous version altered.**