

# LARSSÖN® Antifreeze G12+ SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006

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

**1.1.- Product identifier:** Larssön® Coolant/Antifreeze G12+

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

**Use of the substance/mixture:** Radiator anti-freeze

**1.3.- Details of the supplier of the safety data sheet:**

Company name: LARSON CHEMICALS  
Street: C/ Adolfo Pérez Esquivel 3, Of. 29 -31.  
Place: 28232 – Las Rozas de Madrid – Spain.  
Telephone: +34 91 634 33 09  
e-mail: info@larssonchemicals.com  
Internet: www.larssonchemicals.com  
Responsible Department: Customer Service.

**1.4.- Emergency telephone number:** Call 112

## SECTION 2: Hazards identification:

**2.1.- Classification of the substance or mixture:**

**Classification according to Directive 67/548/EEC or 1999/45/EC**

- Indications of danger: Xn - Harmful
- R phrases: Harmful if swallowed.

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

- Acute toxicity: Acute Tox. 4
- Specific target organ toxicity - repeated exposure: STOT RE 2
- Hazard Statements: Harmful if swallowed.
- May cause damage to organs through prolonged or repeated exposure.

**2.2.- Label elements:**

**Hazardous components which must be listed on the label:** Ethanediol, Ethylene, Glycol.

Signal word: Warning.

Pictograms:



GHS07



GHS08

**Hazard statements**

H302 Harmful if swallowed.  
H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P314 Get medical advice/attention if you feel unwell.  
P330 Rinse mouth.

**2.3.- Other hazards:**

- Following inhalation: Vapour and mist concentrations above the allowable levels or unusually high concentrations may cause irritation to the nose and throat as well as headache, nausea and drowsiness.

- After skin contact: Brief contact with the product may cause slight skin irritation. Prolonged contact (e.g. through soaked clothing) may result in serious skin irritation with symptoms such as redness and swelling.

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- Following eye contact: Conjunctival redness.
- After ingestion: Oral ingestion of small amounts causes kidney damage.
- Caution if victim vomits: Risk of aspiration!

## SECTION 3: Composition/information on ingredients:

### 3.1.- Mixtures: Hazardous components

EC No	CHEMICAL NAQME	QUANTITY
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classificat. according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
203-473-3	ethanediol, ethylene glycol	90 - < 95%
107-21-1	Xn - Harmful R22	
603-027-00-1	Acute Tox. 4, STOT RE 2; H302 H373	
01-2119456816-28		

Full text of R-, H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures:

### 4.1.- Description of first aid measures:

#### General information

- Take off contaminated clothing.

#### After inhalation

- Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

- Wash with plenty of water. Change contaminated clothing. IF ON SKIN: Wash with plenty of water.
- If skin irritation or rash occurs: Get medical advice/attention.

#### After contact with eyes

- Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist. Call a physician immediately. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

#### After ingestion

- Medical treatment necessary. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
- Do NOT induce vomiting.

### 4.2.- Indication of any immediate medical attention and special treatment needed:

- Ethylene glycol poisoning may cause initial symptoms such as behavioral disorders, drowsiness, vomiting, diarrhea, thirst and spasms. Kidney damage and kidney failure along with metabolic acidosis are late poisoning symptoms. Prompt medical treatment complemented by hemodialysis, if necessary, can reduce the toxic effect. Intravenous administration of ethanol in a sodium bicarbonate solution is a recognized antidote. For further treatment information, please consult the Poison Control Centre.

## SECTION 5: Firefighting measures

### 5.1.- Extinguishing media:

#### Suitable extinguishing media:

- Dry extinguishing powder. Water fog. Alcohol-resistant foam.

Unsuitable extinguishing media: - High power water jet.

### 5.2.- Special hazards arising from the substance or mixture:

- The product itself does not burn. In case of fire may be liberated: aerosol or mist generation gas/vapours, harmful.

### 5.3.- Advice for firefighters:

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

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- Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.

## SECTION 6: Accidental release measures

### 6.1.- Personal precautions, protective equipment and emergency procedures:

- Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.
- Special danger of slipping by leaking/spilling product.

### 6.2.- Environmental precautions:

- Do not allow to enter into surface water or drains.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### 6.3.- Methods and material for containment and cleaning up:

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Treat the recovered material as prescribed in the section on waste disposal. Prevent spread over a wide area (e.g. by containment or oil barriers). Take up mechanically, placing in appropriate containers for disposal.

## SECTION 7: Handling and storage:

### 7.1. Precautions for safe handling:

#### **Advice on safe handling:**

- Keep the area well ventilated. Do not breathe gas, fumes or vapors. Avoid contact with skin and eyes.
- Wash hands thoroughly after handling.

#### **Advice on protection against fire and explosion:**

- No special fire protection measures are necessary.

### 7.2. Conditions for safe storage, including any incompatibilities:

#### **Requirements for storage rooms and vessels**

- Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only.

#### **Advice on storage compatibility:**

- Do not store together with: Oxidizing agents.
- Do not store together with: Food and fodder.

#### **Further information on storage conditions:**

- Keep away from heat.

## SECTION 8: Exposure controls/personal protection:

### 8.1. Control parameters:

#### **Exposure limits (EH40)**

TWA (Time Weighted Average) / STEL (Short Term Exposure Limit)

Cas N°	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
107-21-1	Ethane- 1,2-diol, vapour	20	52		TWA (8h)	WEL
		40	104		STEL (15 min)	WEL

### 8.2.- Exposure controls:

#### **Appropriate engineering controls:**

- Adequate protection for the respiratory tract if handled in open containers.  
Do not breathe gas, fumes or vapors.

- When using do not eat, drink, smoke or sneeze at the workplace.
- Keep away from food, drink and animal feed in stuffs.
- Do not put any product-impregnated cleaning rags into your trouser pockets.

#### **Protective and hygiene measures:**

- Remove contaminated, saturated clothing immediately.
- Protect skin by using skin protective cream.
- After work, wash hands and face.

#### **Eye/face protection:**

- Safety glasses with side shields.

#### **Hand protection:**

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- Avoid contact with skin.
- Tested protective gloves are to be worn: Butyl rubber. / NBR (Nitrile rubber).

## Skin protection:

Body protection: not required.

## Respiratory protection:

- With correct and proper use, and under normal conditions, breathing protection is not required.

- The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!.

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## SECTION 9: Physical and chemical properties

### 9.1.- Information on basic physical and chemical properties:

- Physical state: liquid
- Colour: magenta
- Ph-Value: 7,5-9 (33%)
- Initial boiling point, boiling range: 120 °C
- Ignition temperature °C:>400 °C DIN 51794
- Flash point: >110 °C DIN 51758
- Lower explosion limits: not determined
- Upper explosion limits: not determined
- Vapour pressure (at 20 °C): <0,1 hPa
- Density (at 20 °C): 1,123 g/cm<sup>3</sup> DIN 51757
- Water solubility: completely miscible
- Viscosity/kinematic(at 20 °C): >22 mm<sup>2</sup>/s DIN 51562

## SECTION 10: Stability and reactivity:

### 10.1.- Possibility of hazardous reactions:

- Possible with strong oxidizing agents.
- This product is stable under normal conditions. Hazardous reactions are unlikely.
- Not corrosive to metals.

### 10.2.- Incompatible materials:

- Strong oxidizing agents.

### 10.3.- Hazardous decomposition products:

- None.

### 10.4.- Further information:

No thermal decomposition if properly stored / handled /transported.

## SECTION 11: Toxicological information:

### 11.1.- Information on toxicological effects:

Acute toxicity: Dermal.

ATEmix calculated: ATE (oral) 538,6 mg/kg. (Acute Toxicity Estimate of mixture)

CAS N°	Chemical name				
	Exposure routes	Method	Dose	Species	Source
107-21-1	Ethanediol, Ethylene Glycol				
	oral	LD50	4000 mg/kg		
	dermal	LD50	10600 mg/kg	Rabbit	GESTIS

### Irritation and corrosivity:

- Frequently or prolonged contact with skin may cause dermal irritation.

### Sensitising effects:

- Not determined.

### Carcinogenic/mutagenic/toxic effects for reproduction:

- The product is not classified.

### Specific effects in experiment on an animal:

- No data available.

### Additional information on tests:

- The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC). Oral ingestion of small amounts causes kidney damage.
- Contact with the eyes causes eye inflammation.
- Inhalation of mists and vapours causes impaired consciousness.

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## SECTION 12: Ecological information:

### 12.1.- Toxicity:

CAS N°	Chemical name				
	Aquatic toxicity	Method	Dose	[h] [d]	Species
107-21-1	<b>Ethanediol, Ethylene Glycol</b>				
	Acute fish toxicity	LC50	18500 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)
	Acute algae toxicity	ErC50	6500- 7500 mg/l	96 h	Pseudokirchneriella subcapitata
	Acute crustacea toxicity	EC50	> 10,000 mg/l	48 h	Daphnia magna

### 12.2.- Persistence and degradability:

- According to EU criteria: expected to biodegrade fast The product basis (ethylene glycol) itself is readily biodegradable.

### 12.3. Bioaccumulative potential:

- An accumulation is not expected in the human body.

### Partition coefficient n-octanol/water:

CAS N°	Chemical name	Low Pow
107-21-1	Ethanediol, Ethylene Glycol	-1,34

**12.4.- Mobility in soil:** - Do not allow to enter into surface water or drains.

### Further information:

- The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC). Do not allow uncontrolled discharge of product into the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods:

#### Advice on disposal:

- Dispose of waste according to applicable legislation.

#### Waste disposal number of waste from residues/unused products:

160114 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08); antifreeze fluids containing dangerous substances Classified as hazardous waste.

#### Waste disposal number of used product:

160114 Idem.

#### Waste disposal number of contaminated packaging:

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste.

#### Contaminated packaging;

- Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Contaminated packaging should be emptied to the maximum possible extent. After appropriate cleaning, it can be routed to reuse. Packaging not amenable to cleaning must be disposed of in accordance with the statutory regulations.

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## SECTION 14: Transport information

### Land transport (ADR/RID):

- No dangerous good in sense of this transport regulation.

### Marine transport (IMDG):

- No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN):

- No dangerous good in sense of this transport regulation.

### Air transport (ICAO):

- No dangerous good in sense of this transport regulation.

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## SECTION 15: Regulatory information:

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

- Water contaminating class (D): 1 - Slightly water contaminating.

## SECTION 16: Other information

### Relevant R-phrases (Number and full text):

- 22 Harmful if swallowed.

### Relevant H- and EUH-phrases (Number and full text)

- H302 Harmful if swallowed.
- P314 Get medical advice/attention if you feel unwell.
- P330 Rinse mouth.
- H373 May cause damage to kidneys through prolonged or repeated exposure by swallowing.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safetydata sheet.)*