

SAFETY DATA SHEET

In accordance with 453/2010 and 1272/2008

(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2013-10-31

Replaces issued SDS 2012-01-27

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name

Detector liquid -30

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

Identified uses

Detector liquid

1.3. Details of the supplier of the safety data sheet

Company

Fogmaker International AB

Box 8005

SE-35008 VÄXJÖ

Sweden

+46 470-77 22 00

info@fogmaker.com

Telephone

E-Mail

1.4. Emergency telephone number

In case of emergency contact toxicological information, emergency tel 112 (within Europe) or 911 (for USA and Canada). For other countries, use the built-in emergency number in your cell phone

For non-emergency poison information, see <http://www.who.int/ipcs/poisons/centre/directory/euro/en/>

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008

Upon assessment, this mixture is not classified as hazardous according to 1272/2008.

Classification in accordance with 1999/45/EG

This product is assessed and not classified as hazardous.

2.2. Label elements

Label information in accordance with 1272/2008

Hazard pictograms Not applicable

Signal words Not applicable

Hazard statements Not applicable

Label information in accordance with 1999/45/EG

See section 16.

2.3. Other hazards

Not relevant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is composed of a homogeneous aqueous solution.

3.2. Mixtures

Note that the table shows known hazards of the ingredients in a pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
PROPYLENE GLYCOL		
CAS No 57-55-6	-	30 - 70%
EC No 200-338-0	; -	
DIPOTASSIUM TETRABORATE TETRAHYDRATE		
CAS No 12045-78-2	-	< 1,5%
EC No 601-707-2	; -	

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complement used in the calculation of the hazards of this mixture, see Section 16b
Also contains component(s) not necessary to label.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Upon breathing in

Allow the injured person to rest in a warm place with fresh air, if symptoms persist seek medical advice.

Upon contact with the eyes

Remove contact lenses immediately if possible.

Flush eyes with plenty of water. If symptoms persist, seek medical advice.

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

Remove contaminated clothes.

Upon ingestion

No emergency medical treatment necessary.

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

Information on symptoms are ambiguous or missing for this product.

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

Symptomatic treatment.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Recommended extinguishing agents

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

Unsuitable extinguishing agents

May not be extinguished with water dispersed under high pressure.

5.2. Special hazards arising from the substance or mixture

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

The product is not hazardous in the flammable sense.

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

6.2. Environmental precautions

Avoid discharge into soil, water or sewers.

6.3. Methods and material for containment and cleaning up

Adsorb the liquid with an inert adsorbent, Vermiculite, for example. Collect the material for disposal at a waste disposal facility.

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.

6.4. Reference to other sections

Not applicable

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Keep out of reach for children.
- Keep well closed.
- Wash your hands after using the product.
- Do not eat, drink or smoke in premises where this product is stored.

7.2. Conditions for safe storage, including any incompatibilities

- Store in a cool and dry place (above freezing temperature and not greater than 30°C).
- Handle in a premises which is well ventilated.
- Store in a well-ventilated space.

7.3. Specific end uses

- Not relevant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. National limit values, United Kingdom

PROPYLENE GLYCOL

Time-weighted-average exposure limit (TWA) 150 ppm / 474 mg/m³

Other ingredients (cf. Section 3) have no occupational exposure limit values.

8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

Use protective glasses, safety goggles, or a visor.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g.

mechanical risks, temperature conditions or microbiological risks. Very sensitive persons can use gloves labelled "Low Chemical resistant" or "Waterproof" or with the pictogram indicated here.



Special measures for protection of the skin are necessary only in rare working situations. In case of doubt, consult occupational expertise. Show this safety data sheet.

Use proper protective breathing equipment in case of insufficient ventilation.

A breathing mask of the A filter (brown) type, or a IIb (P2) dust filter may be required.

For limitation of environmental exposure, see Section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: red
b) Odour	Scentless
c) Odour threshold	Not applicable
d) pH	7,2-8,2
e) Melting point/freezing point	-30 °C
f) Initial boiling point and boiling range	Not applicable
g) Flash point	Not applicable
h) Evaporation rate	Not applicable
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not applicable
k) Vapour pressure	Not applicable
l) Vapour density	Not applicable
m) Relative density	1,02 kg/L
n) Solubility	Not applicable
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not applicable
q) Decomposition temperature	Not applicable
r) Viscosity	Not applicable

- s) Explosive properties Not applicable
t) Oxidising properties Not applicable

9.2. Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not indicated

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Not indicated

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Avoid contact with strong acids.

Avoid strong bases and oxidizers.

10.6. Hazardous decomposition products

Not indicated

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General or unspecific toxicity

The product is not classified as toxic.

Acute effects

Not classified as an acutely toxic substance.

Harmfulness

The product is not classified as harmful to health.

Repeated dose toxicity

In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

Carcinogenicity

To the best of our knowledge, no carcinogenic effects have been reported for this product.

CMR effects

To the best of our knowledge, no mutagenic or otherwise genetic or reproductive toxic effects have been reported for this product.

Sensibilisation

Hypersensitive reactions cannot be ruled out for persons who are overtly sensitive.

Corrosive and irritating effects

The product is not corrosive. Minor irritation cannot be ruled out for persons who are prone/susceptible.

Eye contact may cause burning pain or irritation.

Synergism and antagonism

To the best of our knowledge, no synergistic effects have been reported for this product or any of its ingredients.

Relevant toxicological properties

PROPYLENE GLYCOL

LD50 rabbit 24h = 20800 mg/kg

LD50 rat 24h ~ 20000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

The product, according to current criteria and based on available information, is considered not to be harmful to the environment.

12.2. Persistence and degradability

The product degrades easily in the natural environment.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

Not indicated

12.6. Other adverse effects

Not indicated

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste handling for the product

The product is not classified as hazardous waste.

Also take local regulations for dealing with waste into account.

Cf. also national waste regulations.

Classification according to 2006/12

Recommended LoW-code: 16 01 15 Antifreeze fluids other than those mentioned in 16 01 14.

Recycling of the product

This product is not usually recycled.

SECTION 14: TRANSPORT INFORMATION

This product is only supposed to be transported by road or railway and just the transport regulations ADR/RID thus apply. If other means of transport are to be used, contact the publisher of this safety data sheet.

14.1. UN number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

Not applicable.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: OTHER INFORMATION

16a. Indication of where changes have been made to the previous version of the safety data sheet

Revisions of this document

Earlier versions

2012-01-27 For information on earlier composition, please contact manufacturer

2008-09-01 For information on earlier composition, please contact manufacturer

2008-08-25 For information on earlier composition, please contact manufacturer

16b. Legend to abbreviations and acronyms used in the safety data sheet

Full texts for Hazard Class and Category Code mentioned in section 3

Combust Liq

Combustible liquids with flash points > 93 C

No tox haz

Not classified as toxic

No environmental hazard

Not classified as being environmentally hazardous

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2013-11-01.

Where such data was lacking, on the second hand the documentation on which this official classification is based was used, e.g. IUCLID (International Uniform Chemical Information Database). On the third hand, information was used from reputable international chemical suppliers, and on the fourth hand from other available information, e.g. safety data sheets from other suppliers or information from non-profit associations, whereby the reliability of the source was judged by an expert. If, in spite of this, reliable information was not found, the hazards were judged by expert opinions based on the known properties of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 453/2010 COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 1999/45/EG DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
- 89/391 COUNCIL DIRECTIVE (89/391/EEC) of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
- 2006/12 DIRECTIVE 2006/12/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2006 on waste
- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Annex I

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

The calculation of the hazards of this mixture has been performed as an evaluation by applying a weight of evidence determination using expert judgement in accordance with 1272/2008 Annex I, weighing all available information having a bearing on the determination of the hazards of the mixture, and in accordance with 1907/2006 Annex XI.

16e. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

Other relevant information

Label information in accordance with 1999/45/EG

Hazard symbol	Not applicable
R-phrases	Not applicable
S-phrases	Not applicable

Editorial information

This safety data sheet has been generated by the program KemRisk®, KemRisk Sweden AB, Teknikringen 10, SE-583 30 Linköping, Sweden.