

SAFETY DATA SHEET

In accordance with 1907/2006 annex II 2015/830 and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)

Issued 2017-10-29

Replaces issued SDS 2017-03-06

Version number 3.0



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

1.1. Product identifier

Trade name

Detector bottle -30°C

Part numbers:

1654, 1654-00-24, 1655, 1655-00-24, 1656, 1656-00-24, 1656-08-24, 1657, 1657-00-24, 1657-08-24

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

35008 VÄXJÖ

Sweden

Telephone

0470-77 22 00

E-mail

info@fogmaker.com

1.4. Emergency telephone number

Acute cases: Call 112, request poison information.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Compressed gas, H280

2.2. Label elements

Hazard pictogram



Signal word

Danger

Hazard statement

H280

Contains gas under pressure; may explode if heated

Precautionary statement

P410+P403

Protect from sunlight. Store in a well-ventilated place

2.3. Other hazards

Not indicated.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

Constituent	Classification	Concentration
NITROGEN GAS		
CAS No: 7727-37-9 EC No: 231-783-9	Press Gas P; H280	55 %
WATER		
CAS No: 7732-18-5 EC No: 231-791-2		15 - 30 %
PROPYLENE GLYCOL		
CAS No: 57-55-6		10 - 20 %

EC No: 200-338-0 REACH: 01-2119456809-23		
SODIUM BENZOATE		
CAS No: 532-32-1 EC No: 208-534-8 REACH: 01-2119460683-35	Eye Irrit 2; H319	<1 %
DIPOTASSIUM TETRABORATE TETRAHYDRATE		
CAS No: 12045-78-2 EC No: 601-707-2		<1 %

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 complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms persist, call a doctor/physician.

Never attempt to administer liquid, or anything else, to an unconscious person via the mouth.

Upon breathing in

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

Upon eye contact

Remove contact lenses immediately if possible.

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

Upon skin contact

Flush with lots of water for at least 5 minutes.

If symptoms occur, contact a physician.

Upon ingestion

Rinse nose, mouth and throat with water.

If symptoms persist contact a doctor.

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

No further relevant information available.

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, high pressure may build up causing the packaging to explode.

Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning.

5.3. Advice for fire-fighters

In case of fire use a respirator mask.

Protective measures should be taken regarding other material at the site of the fire.

Cool closed containers that were exposed to fire with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation and exposure to skin and eyes.

Use recommended safety equipment, see section 8.

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Ensure good ventilation.

6.2. Environmental precautions

Avoid discharge into soil, water or sewers.

6.3. Methods and material for containment and cleaning up

Absorb the liquid with an inert absorbent, vermiculite, for example. Collect the material for disposal at a waste disposal facility.

Let the gas from the leaking gas cylinders evaporate outdoors.

6.4. Reference to other sections

For waste disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid spillage, inhalation and contact with eyes and skin.

Handle in premises which have modern ventilation standards.

Do not eat, drink or smoke in premises where this product is handled.

Wash your hands after using the product.

Store this product separately from food items and keep it out of the reach of children and pets.

7.2. Conditions for safe storage, including any incompatibilities

Store tightly, in original packaging.

Store in a well-ventilated space.

Store in a cool and dry place (above freezing temperature and not greater than 30°C).

Keep away from moisture.

7.3. Specific end uses

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

PROPYLENE GLYCOL

United Kingdoms (EH40/2005)

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

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

In terms of minimizing risks, attention must be paid to the physical hazards (see Sections 2 and 10) of this product according to EU directives 89/391 and 98/24 and national occupational legislation.

8.2.1. Appropriate engineering controls

Maintenance and service of personal protective equipment shall be included in the works plan for internal supervision. All inspections and remedial measures shall be documented.

Eye-rinsing facilities shall be available at the workplace.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

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.

Normal working-clothes of cotton or synthetic material should be adequate. Clothing contaminated with this product should be washed immediately; avoid contact with the skin.

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.

Use protective gloves of butyl rubber, Viton or fluorine rubber, or get advice from an occupational medical expert about alternative materials. Show this safety data sheet.

Respiratory protection

Use proper protective breathing equipment in case of insufficient ventilation.

8.2.3. Environmental exposure controls

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: Solid article. |
| b) Odour | scentless |
| c) Odour threshold | Not indicated |
| d) pH | Not indicated |

e) Melting point/freezing point	Not indicated
f) Initial boiling point and boiling range	Not indicated
g) Flash point	Not indicated
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	Not indicated
l) Vapour density	Not indicated
m) Relative density	Not indicated
n) Solubility	Not indicated
o) Partition coefficient: n-octanol/water	Not applicable
p) Auto-ignition temperature	Not indicated
q) Decomposition temperature	Not indicated
r) Viscosity	Not indicated
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

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

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

Carbon monoxide (CO), carbon dioxide (CO₂) and harmful and irritating substances.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

The product is not classified as toxic.

Acute toxicity

The criteria for classification cannot be considered fulfilled based on available data.

PROPYLENE GLYCOL

LD50 rabbit 24h: > 10000 mg/kg Dermally

LD50 rat 24h: 21000 - 34000 mg/kg Orally

SODIUM BENZOATE

LC50 rat 4h: > 12.2 mg/l Inhalation

LD50 rat 24h: 3450 mg/kg Orally

Skin corrosion/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Serious eye damage/irritation

The criteria for classification cannot be considered fulfilled based on available data.

Respiratory or skin sensitisation

The criteria for classification cannot be considered fulfilled based on available data.

Germ cell mutagenicity

The criteria for classification cannot be considered fulfilled based on available data.

Carcinogenicity

The criteria for classification cannot be considered fulfilled based on available data.

Reproductive toxicity

The criteria for classification cannot be considered fulfilled based on available data.

STOT-single exposure

The criteria for classification cannot be considered fulfilled based on available data.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

Aspiration hazard

The criteria for classification cannot be considered fulfilled based on available data.

SECTION 12: Ecological information

12.1. Toxicity

The product is not to be labelled as an environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

PROPYLENE GLYCOL

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 40613 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 96 h: 4850 - 34400 mg/L

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 43500 mg/l

LC50 Fish 96h: 4660 - 54600 mg/L

NOEC Fish 168 h: 98 mg/l

SODIUM BENZOATE

LC50 Fish 96h: > 100 mg/l

12.2. Persistence and degradability

The product degrades easily in the natural environment.

12.3. Bioaccumulative potential

This product or its ingredients do probably not accumulate 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

This substance is not a PBT or a vPvB.

12.6. Other adverse effects

No known effects or hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Empty, rinsed packaging is sent for recycling where practicable.

Observe local regulations.

Final disposal of this product should be carried out by a company authorised to deal with hazardous waste.

See also national waste regulations.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number

1066

14.2. UN proper shipping name

STICKSTOFF, VERDICHTET

14.3. Transport hazard class(es)

Class

2: Gases

Classification code (ADR/RID)

1A: Compressed gas: asphyxiant

Subsidiary risk (IMDG)

No subsidiary risk according to IMDG

Labels



14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: E

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

Not applicable

14.8 Other transport information

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres

Stowage category A (IMDG)

Emergency Schedule (EmS) for FIRE (IMDG) F-C

Emergency Schedule (EmS) for SPILLAGE (IMDG) S-V

SECTION 15: Regulatory information

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

Not indicated.

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

2017-03-06 Revisions of this document has, where not otherwise stated, been caused by changes in the regulations

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

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

Press Gas *P* Compressed gas

Eye Irrit 2 Irritates eyes (Category 2)

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

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: E; Passage through category E tunnels is strictly forbidden

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres

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 2017-10-29.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

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

2015/830 COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 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

EH40/2005 EH40/2005 Workplace exposure limits

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

98/24 COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of

Article 16(1) of Directive 89/391/EEC)

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

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

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

H280 Contains gas under pressure; may explode if heated

H319 Causes serious eye irritation

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

Warning for misuse

This product can cause injuries if not used properly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

Other relevant information

Editorial information



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se