SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

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

1.1. Product identifier

Product name : LEAK DETECTOR Product code : 952.

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

Gas leak detector.

Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name : ORAPI.

Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE. Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.

fds@orapi.com

1.4. Emergency telephone number : 33-(0)1-45-42-59-59.

Association/Organisation : INRS .

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

May produce an allergic reaction (EUH208).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling :EUH208EUH210Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.Safety data sheet available on request.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| n | |
|----------|--|

| Identification | (EC) 1272/2008 | 67/548/EEC | Note | % |
|-----------------------|---------------------|--------------|------|----------------|
| CAS: 100-37-8 | GHS06, GHS05, GHS02 | С | [1] | 0 <= x % < 2.5 |
| EC: 202-845-2 | Dgr | C;R34 | | |
| | Flam. Liq. 3, H226 | Xn;R20/21/22 | | |
| 2-DIETHYLAMINOETHANOL | Acute Tox. 4, H302 | R10 | | |
| | Acute Tox. 3, H311 | | | |
| | Skin Corr. 1B, H314 | | | |
| | Acute Tox. 4, H332 | | | |
| | STOT SE 3, H335 | | | |

| GAG 2624 22 5 | CHIGOT CHIGOS CHIGOD | X7 XI | | 0 0 0 7 |
|------------------------------|-----------------------|----------------|-----|----------------|
| CAS: 2634-33-5 | GHS07, GHS05, GHS09 | Xn,N | | 0 <= x % < 2.5 |
| EC: 220-120-9 | Dgr | Xn;R22 | | |
| REACH: exempted | Acute Tox. 4, H302 | Xi;R38-R41-R43 | | |
| | Skin Irrit. 2, H315 | N;R50 | | |
| 1,2-BENZISOTHIAZOL-3(2H)-ONE | Skin Sens. 1, H317 | | | |
| | Eye Dam. 1, H318 | | | |
| | Aquatic Acute 1, H400 | | | |
| | M Acute $= 1$ | | | |
| CAS: 1310-58-3 | GHS06, GHS05 | C | [1] | 0 <= x % < 2.5 |
| EC: 215-181-3 | Dgr | C;R35 | | |
| REACH: 01-2119487136-33 | Met. Corr. 1, H290 | Xn;R22 | | |
| | Acute Tox. 3, H301 | | | |
| POTASSIUM HYDROXIDE | Skin Corr. 1A, H314 | | | |
| CAS: 1310-73-2 | GHS05 | С | [1] | 0 <= x % < 2.5 |
| EC: 215-185-5 | Dgr | C;R35 | | |
| REACH: 01-2119457892-27 | Met. Corr. 1, H290 | | | |
| | Skin Corr. 1A, H314 | | | |
| SODIUM HYDROXIDE | | | | |

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of an allergic reaction, seek medical attention. Consult a physician in case of disorder.

In the event of splashes or contact with eyes :

Wash abundantly with fresh and clean water during 15 minutes by maintaining the eyelids open. If there is any pain, redness or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

In the event of an allergic reaction, seek medical attention.

Remove clothing impregnated and wash carefully the skin with some water and some soap or use a known cleaner.

In the event of swallowing :

Seek medical attention, showing the label.

Do not induce vomiting.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable methods of extinction

- In the event of a fire, use :
- sprayed water or water mist
- foam
- powder

- carbon dioxide (CO2)

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- nitrogen oxides (NOx)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container away from heat, bad weather, dampness and freezing.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

Occupational exposure limits :

| - France (INRS - ED984 :2012) : |
|---------------------------------|
|---------------------------------|

| CAS | VME-ppm : | VME-mg/m3: | VLE-ppm : | VLE-mg/m3: | Notes : | TMP No : |
|-----------------------|------------------|-----------------|-----------|--------------|------------|-----------|
| 100-37-8 | 10 | 50 | - | - | * | 49.49 Bis |
| 1310-58-3 | - | - | - | 2 | - | - |
| 1310-73-2 | - | 2 | - | - | - | - |
| - Germany - AGW (BA | uA - TRGS 900, | 21/06/2010): | | | | |
| CAS | VME : | VME : | Excess | Notes | | |
| 100-37-8 | 5 ml/m3 | 24 mg/m3 | 1(I) | DFG, H | | |
| - UK / WEL (Workplace | e exposure limit | s, EH40/2005, 2 | 007): | | | |
| CAS | TWA: | STEL: | Ceiling : | Definition : | Criteria : | |
| 1310-58-3 | - | 2 mg/m3 | - | - | - | |

| 1310-73-2 - | 2 mg/m3 | | |
|----------------------------|-------------------------|------------------------|------|
| Derived no effect level (D | NEL) or derived minimur | n effect level (DMEL): | |
| SODIUM HYDROXI | DE (CAS: 1310-73-2) | | |
| Final use: | | Workers. | |
| Exposure method: | | Inhalation. | |
| Potential health eff | ects: | Long term local effe | cts. |
| DNEL : | | 1 mg of substance/m | 3 |
| Final use: | | Consumers. | |
| Exposure method: | | Inhalation. | |
| Potential health eff | ects: | Long term local effe | cts. |
| DNEL : | | 1 mg of substance/m | 3 |

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| ••••••• | |
|--------------------------------------------------------|-----------------|
| General information : | |
| Physical state : | Fluid liquid. |
| Important health, safety and environmental information | |
| pH : | Not stated. |
| | Slightly basic. |
| Boiling point/boiling range : | 100 °C. |
| Flash point interval : | Not relevant. |
| Vapour pressure (50°C) : | Not relevant. |
| Density : | = 1 |
| Water solubility : | Dilutable. |
| Melting point/melting range : | Not relevant. |
| Self-ignition temperature : | Not relevant. |
| Decomposition point/decomposition range : | Not relevant. |
| % VOC : | 0 |

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- frost

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO2)

- nitrogen oxides (NOx)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

Acute toxicity :

| POTASSIUM HYDROXIDE (CAS: 1310-58-3) Oral route : | LD50 = 273 mg/kg Species : Rat |
|---------------------------------------------------------|----------------------------------------------|
| 1,2-BENZISOTHIAZOL-3(2H)-ONE (CAS: 2634 Oral route : | -33-5) LD50 = 1193 mg/kg Species : Rat |
| Dermal route : | LD50 = 4115 mg/kg Species : Rat |
| 2-DIETHYLAMINOETHANOL (CAS: 100-37-8) Oral route : | LD50 = 1320 mg/kg Species : Rat |
| Dermal route : | LD50 = 885 mg/kg Species : Rat |

Inhalation route (Dusts/mist) :

11.1.2. Mixture

Respiratory or skin sensitisation :

Contains at least one sensitising substance. May cause an allergic reaction.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

SODIUM HYDROXIDE (CAS: 1310-73-2) Fish toxicity :

LC50 = 125 mg/l Species : Gambusia affinis

LC50 = 4.6 mg/l

| | Duration of exposure : 96 h |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Crustacean toxicity : | EC50 = 76 mg/l Species : Daphnia magna Duration of exposure : 48 h |
| 1,2-BENZISOTHIAZOL-3(2H)-ONE (CAS: 263 | (4-33,5) |
| Fish toxicity : | LC50 = 2.18 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Crustacean toxicity : | EC50 = 2.94 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Algae toxicity : | ECr50 = 0.11 mg/l Factor M = 1 Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test) |
| 12.1.2. Mixtures | |
| No aquatic toxicity data available for the mixture. | |
| 12.2. Persistence and degradability | |
| 12.2.1. Substances | |
| SODIUM HYDROXIDE (CAS: 1310-73-2) | |
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |
| 1,2-BENZISOTHIAZOL-3(2H)-ONE (CAS: 263 | 4-33-5) |
| Biodegradability : | Rapidly degradable. |
| 12.3. Bioaccumulative potential | |
| No data available. | |
| 12.4. Mobility in soil | |
| No data available. | |
| 12.5. Results of PBT and vPvB assessment | |
| No data available. | |
| 12.6. Other adverse effects | |
| No data available. | |
| SECTION 13 : DISPOSAL CONSIDERATIONS | |
| Proper waste management of the mixture and/or its c | ontainer must be determined in accordance with Directive 2008/98/EC. |
| 13.1 Waste treatment methods | |

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

- The following regulations have been used:
- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

| H226 | Flammable liquid and vapour. |
|-------------|---------------------------------------------------------------|
| H290 | May be corrosive to metals. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| R 10 | Flammable. |
| R 20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R 22 | Harmful if swallowed. |
| R 34 | Causes burns. |
| R 35 | Causes severe burns. |
| R 38 | Irritating to skin. |
| R 41 | Risk of serious damage to eyes. |
| R 43 | May cause sensitisation by skin contact. |
| R 50 | Very toxic to aquatic organisms. |
| | |

Abbreviations :

DNEL : Derived No-Effect Level

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).