

**Safety data sheet**  
according to 1907/2006/EC, Article 31 Commission  
regulation (EU) 2020/878

Printing date 02.01.2024

Version number 8.0 (replaces version 7.0)

Revision: 02.01.2024

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

- **1.1 Product identifier**
- **Trade name:** Formamide, dried (max. 0,02% H<sub>2</sub>O), for analysis, ExpertQ® (Karl Fischer)
- **Article number:** FO0028
- **CAS Number:**  
75-12-7
- **EC number:**  
200-842-0
- **Index number:**  
616-052-00-8
- **Registration number** 01-2119496064-35-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory reagent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Scharlab, S.L.  
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa  
08181 Sentmenat (Barcelona) SPAIN  
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65  
email: scharlab@scharlab.com  
Internet Web Site: www.scharlab.com
- **Regional representation:**  
Scharlab, S.L.  
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email: scharlab@scharlab.com  
Internet Web Site: www.scharlab.com
- **Further information obtainable from:** Technical Department
- **1.4 Emergency telephone number:**  
Please contact the regional Scharlab distributor/dealer in your country  
During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

- Carc. 2    H351    Suspected of causing cancer.  
Repr. 1B    H360D    May damage the unborn child.  
STOT RE 2 H373    May cause damage to organs through prolonged or repeated exposure.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the GB CLP regulation.

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**Hazard pictograms**

GHS08

**Signal word** Danger**Hazard statements**

H351 Suspected of causing cancer.

H360D May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

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.**SECTION 3: Composition/information on ingredients****3.1 Substances****CAS No. Description**

75-12-7 formamide

**Identification number(s)****EC number:** 200-842-0**Index number:** 616-052-00-8**SVHC**

75-12-7 formamide

**SECTION 4: First aid measures****4.1 Description of first aid measures****After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:** Rinse opened eye for several minutes under running water.**After swallowing:** If symptoms persist consult 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**

No further relevant information available.

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### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** 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:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Dilute with plenty of water.  
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).  
Dispose contaminated material as waste according to section 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Open and handle receptacle with care.  
Do not eat, drink or smoke during use.  
Wash hands after handling.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** See product label for storage temperature.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  

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**75-12-7 formamide**  
WEL Short-term value: 56 mg/m<sup>3</sup>, 30 ppm  
Long-term value: 37 mg/m<sup>3</sup>, 20 ppm
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing

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Wash hands before breaks and at the end of work.

Store protective clothing separately.

• **Respiratory protection:** Not required.

• **Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye/face protection** Goggles recommended during refilling

## SECTION 9: Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **General Information**

• **Physical state**

Fluid

• **Colour:**

Colourless

• **Odour:**

Odourless

• **Odour threshold:**

Not determined.

• **Melting point/freezing point:**

2.5 °C

• **Boiling point or initial boiling point and boiling range**

210.5 °C

• **Flammability**

Not applicable.

• **Lower and upper explosion limit**

• **Lower:**

Not determined.

• **Upper:**

Not determined.

• **Flash point:**

175 °C

• **Decomposition temperature:**

210.5 °C

• **pH**

Not determined.

• **Viscosity:**

• **Kinematic viscosity**

Not determined.

• **Dynamic:**

Not determined.

• **Solubility**

• **water:**

Fully miscible.

• **Partition coefficient n-octanol/water (log value)**

Not determined.

• **Vapour pressure at 20 °C:**

0.03 hPa

• **Density and/or relative density**

• **Density at 20 °C:**

1.1339 g/cm<sup>3</sup>

• **Relative density**

Not determined.

• **Vapour density**

Not determined.

• **9.2 Other information**

• **Appearance:**

• **Form:**

Fluid

• **Important information on protection of health and environment, and on safety.**

• **Ignition temperature:**

Not determined.

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- |  |   |
|--|---|
| · <b>Explosive properties:</b>   | Product does not present an explosion hazard. |
| · <b>Molecular weight</b>  | 45.02 g/mol                                   |
| · <b>Change in condition</b>   |   |
| · <b>Evaporation rate</b>  | Not determined.                               |
| · <b>Information with regard to physical hazard classes</b>                        |   |
| · <b>Explosives</b>  | Void  |
| · <b>Flammable gases</b>   | Void  |
| · <b>Aerosols</b>  | Void  |
| · <b>Oxidising gases</b>   | Void  |
| · <b>Gases under pressure</b>  | Void  |
| · <b>Flammable liquids</b>   | Void  |
| · <b>Flammable solids</b>  | Void  |
| · <b>Self-reactive substances and mixtures</b>                                     | Void  |
| · <b>Pyrophoric liquids</b>  | Void  |
| · <b>Pyrophoric solids</b>   | Void  |
| · <b>Self-heating substances and mixtures</b>                                      | Void  |
| · <b>Substances and mixtures, which emit flammable gases in contact with water</b> | Void  |
| · <b>Oxidising liquids</b>   | Void  |
| · <b>Oxidising solids</b>  | Void  |
| · <b>Organic peroxides</b>   | Void  |
| · <b>Corrosive to metals</b>   | Void  |
| · <b>Desensitised explosives</b>   | Void  |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat
- **10.5 Incompatible materials:**  
Basis  
Strong oxidising agents.  
Hydrogen peroxide, Iodides, Pyridine, Sulphur oxides.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
  - **Acute toxicity** Based on available data, the classification criteria are not met.
  - **LD/LC50 values relevant for classification:**
- |            |          |                    |
|------------|----------|--------------------|
| Oral       | LD50     | 5,325 mg/kg (rat)  |
| Dermal     | LD50     | >3,000 mg/kg (rat) |
| Inhalative | LC50/4 h | 21 mg/l (rat)      |
- **Skin corrosion/irritation**  
Fur - Rabbit  
Result: No skin irritation - 20 h
  - **Serious eye damage/irritation**  
Eyes - Rabbit

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- Result: Mild irritation
- **Germ cell mutagenicity**  
Ames Test  
Escherichia coli  
Salmonella typhimurium  
Result: negative  
In vitro test  
Other cell types  
Result: positive  
In vitro test - Embryo  
Result: negative  
Mouse - Red blood cells (erythrocytes)  
Result: negative  
Mouse - Bone marrow  
Positive result  
Drosophila melanogaster  
Result: negative
  - **Carcinogenicity**  
Suspected of causing cancer.  
IARC: No component of this product is identified as a probable, possible or confirmed human carcinogen at levels greater than or equal to 0.1% by the International Agency for Research on Carcinogens (IARC).  
Suspected of causing cancer.
  - **Reproductive toxicity** May damage the unborn child.
  - **STOT-repeated exposure**  
Oral - May cause damage to organs through prolonged or repeated exposure.  
Blood.  
May cause damage to organs through prolonged or repeated exposure.
  - **11.2 Information on other hazards**
  - **Endocrine disrupting properties** Substance is not listed.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**  
Toxicity to fish  
LC50 static test - Leuciscus idus (Golden orfe) - 6569 mg/L - 96 h  
Toxicity to daphnia and other aquatic invertebrates  
EC50 static test - Ceriodaphnia (Water flea) - >500 mg/L - 48 h  
Toxicity to algae  
ErC50 static test - Desmodemus subspicatus (green algae) - >500 mg/L - 96 h  
Toxicity to bacteria  
EC50 static test - Activated sludge - 1000 mg/L - 30 min
- **12.2 Persistence and degradability**  
Biodegradability  
Aerobic - Exposure time: 28 d  
Result: 99 % - Readily Biodegradable  
(OECD TG 301B)
- **12.3 Bioaccumulative potential** No further relevant information available.
- **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**  
The product does not contain substances with endocrine disrupting properties.

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• **12.7 Other adverse effects**

Additional ecological information  
 Danger to drinking water supplies.  
 Discharge into the environment must be avoided.

• **Additional ecological information:**

• **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### SECTION 13: Disposal considerations

• **13.1 Waste treatment methods**

• **Recommendation**

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

The waste code indicated in this document is indicative according to the properties of each substance, but does not always apply.

It is recommended to consult the local/national waste manager for more details on the waste and waste management regulations, which differ according to the legislation of each country.

• **Uncleaned packaging:**

• **Recommendation:** Disposal must be made according to official regulations.

• **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 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** Void

• **Class** Void

• **14.4 Packing group**

• **ADR, IMDG, IATA** Void

• **14.5 Environmental hazards:**

• **Marine pollutant:** No

• **14.6 Special precautions for user** Not applicable.

• **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

• **UN "Model Regulation":** Void

### SECTION 15: Regulatory information

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

• **Poisons Act**

• **Regulated explosives precursors** Substance is not listed.

• **Regulated poisons** Substance is not listed.

• **Reportable explosives precursors** Substance is not listed.

• **Reportable poisons** Substance is not listed.

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- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I -**
- **National regulations:**
- **Substances of very high concern (SVHC) according to UK REACH**  
75-12-7 formamide
- **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.

- **Department issuing SDS:** Product Safety Department
- **Contact:** msds@scharlab.com
- **Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
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  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Carc. 2: Carcinogenicity – Category 2  
Repr. 1B: Reproductive toxicity – Category 1B  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2