Date published: 07.10.2017.

Version and revision date : 7 07.10.2017.



Safety Data Sheet According to Regulation (EU) 830/2015

1030 Formic Acid 98%

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier Name: Formic Acid 98%

REACH Registration Number: 01-2119491174-37-XXXX**1.2 Relevant identified uses of the substance or mixture:**

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U. C/Garraf 2 Polígono Pla de la Bruguera E-08211 Castellar del Vallès (Barcelona) Spain Tel. (+34) 937 489 400 e-mail: product.safety@panreac.com

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

2. Identification of dangers

2.1 Classification of the substance or the mixture.

Skin Corr. 1A Flam. Liq. 3 Acute Toxicity Inhalation cat. 3 Acute Toxicity Oral cat. 4 Eye Dam. 1

2.2 Label elements:

Hazard Pictograms



Signal word

Hazard statements

H314 Causes severe skin burns and eye damage.

H226 Flammable liquid and vapour.

H331 Toxic if inhaled.

H302 Harmful if swallowed.

EUH071 Corrosive to the respiratory tract.

Precautionary statements

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

P264 Wash...thoroughly after handling.

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

2.3 Other hazards:

No further relevant information available.

3. Composition/information on ingredients

3.1 Substances

Name: Formic Acid 98% Formula: HCOOH M.= 46,03 CAS [64-18-6] EC number (EINECS): 200-579-1 EC index number: 607-001-00-0 REACH Registration Number: 01-2119491174-37-XXXX

3.2 Mixtures

4. First aid measures

4.1 Description of first aid measures

Never provide drink or induce vomiting in the event of loss of consciousness. The first-aider must be protected.

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

Swallowing:

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

Inhaling:

Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

5. Firefighting measures

5.1 Extinguishing media:

Water. Alcohol resistant foam. Dry powder.

5.2 Special hazards arising from the substance or mixture:

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten In the event of fire, toxic fumes may form: CO. Precipitate fumes formed with water. Upon contact with metals, hydrogen gas may form (there is a risk of explosion).

5.3 Advice for firefighters:

Suitable clothing and footwear.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Do not inhale the fumes.

6.2 Environmental precautions:

Avoid pollution of the soil, water supplies and drains.

6.3 Methods and material for containment and cleaning up:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water. Neutralize with diluted sodium hydroxide.

6.4 Reference to other sections

Not applicable

7. Handling and storage

7.1 Precautions for safe handling:

Content release pression after a long storage. Light-sensitive. Limited shelf-life.

7.2 Conditions for safe storage, including any incompatibilities:

Well sealed containers with exhaust valve. In well ventilated premises. Dry atmosphere. Away from sources of ignition and heat.

Recommended storage temperature: Room temperature. Away from light.

7.3 Specific end use(s)

No more relevant data available

8. Exposure controls/personal protection

8.1 Control parameters:

VLA-EC: 10 ppm = 18 mg/m3 VLA-ED: 5 ppm = 9 mg/m3

8.2 Exposure controls

Ensure good ventilation and renewal of the air in the premises.

Respiratory protection: In the event of fumes forming/aerosols, use suitable respiratory protection. Filter B. Filter A3.

Hand protection: Use suitable gloves PVC neopren

Eye/face protection: Use safety glasses.

Individual hygiene measures: Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done.

Environmental exposure controls: Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: liquid Colour: Colourless Granulometry: N/A Odour: Piquant. pH: N/A Melting point/freezing point: 8,4 °C Initial boiling point and boiling range: 100,5 °C Flash point: 50 °C Flammability (solid, gas): N/A Upper/lower flammability or explosive limits: 33 %(V) / 14 %(V) Vapour pressure: 43 hPa (20 °C) Vapour density: N/A Relative density: (20/4) 1,219 g/ml Solubility: Miscible with water

Partition coefficient: n-octanol/water: N/A Auto-ignition temperature: 520 °C Decomposition temperature: N/A Kinematic viscosity: N/A Dynamic viscosity: N/A **9.2 Other information** No more relevant data available **10. Stability and reactivity**

-

10.1 Reactivity No specific data.

10.2 Chemical stability:

Heat sensitive. Light-sensitive. The gases/fumes can form explosive mixtures with the air.

10.3 Possibility of hazardous reactions

No specific data.

10.4 Conditions to avoid:

High temperatures.

10.5 Incompatible materials:

Alkaline solutions. Aluminium. Strong oxidant agents. Concentrated sulfuric acid. Non-metal oxides. Nitrogen organic compounds. Metal catalysts. Phosphorus Oxides. Hydrogen peroxide.

10.6 Hazardous decomposition products:

Carbon monoxide. Hydrogen.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD50 oral rat : 1.100 mg/kg

Dangerous effects for health:

If fumes inhaled: Irritations to the respiratory tracts. Very corrosive substance. May cause: bronchopneumonia oedemas in the respiratory tract Upon contact with the skin: burns Through contact with the eyes: burns sight disorders conjunctivitis The fumes can cause irritation of the eyes. If swallowed: Burns in the oesophagus and stomach. Irritations to the mucosae acidosis kidney problems

12. Environmental information

12.1 Toxicity:

- EC50 test (mg/l): Bacteria (E. coli) EC0 1000 mg/l Classification: Bacteria (Photobacterium phosphoreum) EC50 7.96 mg/l Classification: Extr. toxic Fish (Leuciscus Idus) EC0 1000 mg/l EC50 120 mg/l Highly toxic In the case of formiate: Algae 100 mg/l Classification: Highly toxic Fish 500 mg/l Classification: Highly toxic Daphnia 120 mg/l Classification: Highly toxic - Receptor medium: Risk for the water environment Medium Risk for the land environment Low - Observations:

12.2 Persistence and Degradability : - Test: - Biotic degradation classification: BOD5 0,27 g/g BOD5/COD **Biodegradability** ThOD 0,35 g/g High, over 1/3 - Abiotic degradation depending on pH: - Observations: Biodegradable product. **12.3 Bioaccumulative potential:** - Test: - Bioaccumulation: Risk - Observations: 12.4 Mobility in soil : Repartition: $\log P(oct) = -1,55$

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other adverse effects:

If suitable handling conditions are maintained, no ecological problems are to be anticipated.

13. Disposal considerations

13.1 Waste treatment methods:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country. In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

14. Transport information

14.1 UN number

UN1779

14.2 UN proper shipping name FORMIC ACID with more than 85% acid by mass

14.3 Transport hazard class(es)

8

3

14.4 Packing group ADR/IMDG: II IATA: II

14.5 Environmental hazards

14.6 Special precautions for user Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

15. Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

Not applicable

16. Other information

Other precautionary statements

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see on this label).

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

P403+P235 Store in a well-ventilated place. Keep cool.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P261 Avoid breathing dust, fume, gas, mist, vapours or spray.

P271 Use only outdoors or in a well-ventilated area.

P270 Do no eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P311 Call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

Version and revision date : 7 07.10.2017

Date published: 07.10.2017

In respect of the previous review, changes have been made to the following sections: 1,2,4,5,6,7,8,9,10,11,13,14,15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.