PanReac AppliChem ITW Reagents

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

1029 **Formic Acid 85%**

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

1.1 Product identifier
Name:
Formic Acid 85%

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) Nº 1907/2006, the annual tonnage does not requiere a registration, the registration is envisaged for a later registration deadline or it is a mixture.

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. 1B
Acute Toxicity Inhalation cat. 3
Acute Toxicity Oral cat. 4

2.2 Label elements:

Hazard Pictograms

Signal word

Hazard statements

H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H331 Toxic if inhaled.
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

Aqueous solution

Name: Formic Acid 85%
Formula: HCOOH M.= 46,03 CAS [64-18-6]
EC number (EINECS): 200-579-1
EC index number: 607-001-00-0

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:
Possible formation of pressure inside the container. Light-sensitive. Limited shelf-life.

7.2 Conditions for safe storage, including any incompatibilities:
Well sealed containers. 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 A3.

Hand protection:
Use suitable gloves neopren PVC

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: N/A
Initial boiling point and boiling range:
N/A
Flash point: 60 °C
Flammability (solid, gas):
N/A
Upper/lower flammability or explosive limits:
N/A
Vapour pressure: N/A
Vapour density: N/A

Relative density: (20/4) 1,20 g/ml
Solubility: Miscible with water
Partition coefficient: n-octanol/water:
N/A
Auto-ignition temperature:
N/A
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.
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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.
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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.

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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.