

Safety Data sheet

According to Directive 1907/2006

0124 FORMIC ACID 99% w/w

Creation Date: 01/12/2010 Revision date: 31/05/2017

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

Identification of the product

Catalogue No: 0124 Product name: FORMIC ACID 99% w/w Use of the substance: Analysis and chemical-pharmaceutical production.
REACH registration Nr.: 01-2119491174-37-XXXX

Company/undertaking identification

QUALITY CHEMICALS, SL - C/Fornal 35. Pol. Ind. Can Comelles Sud 08292 ESPARREGUERA ESPAÑA Tel. 937709730 Fax. 937709337 e-mail: dtecnica@qualitychemicals.com

Emergency telephone No.

Quality Chemicals S.L. Tel. +34 937709730 Only in business hours. Instituto Nacional de Toxicología *Madrid* Tel:915620420
Chemtrec: 800-424-9300

2. Hazards identification

Labelling in accordance with directive 1907/2006



R-phrases

35 Causes severe burns.

S-phrases

23.2 Do not breath vapour.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

45 In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where poss

Labelling in accordance with directive 1272/2008



H-phrases

314 Causes severe skin burns and eye damage.

P-phrases

309+311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

305+351 If in eyes: Rinse cautiously with water for several minutes
338 Remove contact lenses, if present and easy to do. Continue rinsing.

Signal word : DANGER

CORROSIVE

R-phrases:

Causes severe burns.

3. Composition/information on ingredients

For the full text of the R phrases mentioned in this section, see Section 16.

CAS-No.: 64-18-6

Molecular Weight: 46,03

Chemical formula: HCOOH

EC-Index-No.: 607-001-00-0

EC-No.: 200-579-1

R-phrases 35

For more information about the R-Phrases text you can consult the paragraph 16

4. First aid measures

After inhalation:

Fresh air

Call the physician

After skin contact:

Rinse with abundant water (or have a shower)

Extract the substance by means of cotton impregnated with polietilenglicol 400

Undress immediately of the contaminated clothes

After eye contact:

Rinse with abundant water, keeping eyelids open (at least 10 min)

Call the ophthalmologist

After swallowing:

Drink lots of water

Avoid vomiting (perforation risk)

Call the doctor

Do not carry out neutralization measures

5. Fire-fighting measures

Suitable extinguishing media:

Water

Dust

Foam

Carbon dioxide

Special risks:

Combustible

Steam heavier than air

Possible formation of explosive mixtures with air

Ambient fire may liberate hazardous vapours

Special protective equipment for fire fighting:

Remain in the risk area only if provided with independent artificial respiratory systems.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Wear suitable protective clothing

Other information:

Precipitate emergent steam with water
Cool the containers spraying water
Avoid the penetration of the extinction water in superficial or subterraneous aquifers.

6. Accidental release measures

Person-related precautionary measures:

Not to inhale steam/aerosols
Avoid contact with the substance
Ventilation in closed spaces

Procedures for cleaning/absorption:

To gather with absorbents
To come to the elimination of the remainders
Rinse.

Environmental protection measures:

Do not send it to the sewerage system

7. Handling and storage

Handling: Without other exigencies

Storage:

Well closed
In well-ventilated place
Protected from light.
Moved away of heat sources

8. Exposure controls/personal protection

Exposure limit control
TLV-TWA: 5 ppm (9 mg/m³). TLV-STEL: 10 ppm (18 mg/m³).

Personal protective equipment:

Respiratory protection:

Necessary when steam/aerosols are generated

Hand protection:

Protection gloves:
Polychloroprene
Natural latex

Eye protection:

Needed

Skin and body protection:

Protective clothing against acid

Other protective equipment:

Change immediately contaminated clothes
Recommendable preventive protection of the skin
Wash hands and face when the work is finished
Fulfill the commitments under local environmental protection legislation

9. Physical and chemical properties

Physical state: Liquid
Colour: Colourless
Odour: Biting
pH value: 2,2 (10 g/l H₂O)
Dynamic viscosity: 1,8 mPa·s
Melting point: 8,4°C
Boiling point: 100°C
Ignition temperature: 480°C
Flash point: 50°C
Explosion limits: Lower: 12 Vol % Upper: 38 Vol %
Vapour pressure: 42 hPa
Density (g/cm³): 1,220
Solubility: Soluble (water)
log P(ow): -0,54

10. Stability and reactivity

Substances to be avoided:

Alkaline hydroxides.
Strong oxidizing agents.
Aluminium.
Hydrogen peroxide.
Sodium hypochlorite.
Nonmetallic oxides.
Nitric acid.
Phosphorus oxide.
Nitrogen organic compounds.
Concentrated sulfuric acid.
Metal catalyts.

Hazardous decomposition products:

Carbon monoxide.
Hydrogen.

Further information:

Light-sensitive.
Heat-sensitive.
To avoid heating.
Explosible with air in a vaporous/gaseous state.
Protect from direct sunlight.

11. Toxicological information

Acute toxicity:

LC₅₀ (inhalation, rat): 7,4 mg/l/4h. LD₅₀ (oral, rat): 730 mg/kg.

After eye contact:

Burns
Conjunctivitis
Irritation

After skin contact:

Burns

After inhalation:

Irritation of: respiratory tract
Dyspnoea
Oedemas in the respiratory tract

After swallowing:

Burns in oesophagus

Burns in the digestive tract
Burns of mucous membranes
Acidosis
Damage of kidneys
Haemolysis

Further toxicological information:

The precautions adapted for chemical agents must be observed
Non carcinogenic in animal experiments
No indication of mutagenic activity
No impairment of reproductive performance suspected

12. Ecological information

Fishes: *Leuciscus idus*: LC50: 46-100 mg/l/96h
Daphnia: *Daphnia magna*: EC50: 34,2 mg/l/48h
Algae: *Desmodesmus subspicatus*: IC50: 27 mg/l/72h
Bacteria: *Ps. putida*: EC50: 47 mg/l/17h. *Photobacterium phosphoreum*: EC50: 7,96 mg/l.
Log P(ow): -0,54
Degradability: Readily biodegradable
BOD5 0,27 g/g
TOD 0,35 g/g
Bioaccumulation: No bioaccumulation is to be expected (log Pow < 1)

Other harmful effects:

Harmful effect on aquatic organisms
Forms corrosive mixtures with water even if diluted
Toxic effect on fish and plankton
Harmful effect due to pH shift
Neutralization possible in waste water treatment plants
Do not allow to enter waters, waste water, or soil

13. Disposal considerations

Product:

Dispose as regulated in the community countries by local regulations.
Please contact with the suitable authority in each case (Public Administration or company specialized in

Packaging:

Product packaging disposal must be disposed of in compliance with the respective local regulations.
For contaminated packaging the same measures must be adopted as for the contaminated product.
Not contaminated packaging must be disposed of as domestic residues or recycled material.
European Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

14. Transport information

Overland transport ADR/RID

UN: 1779
Class: 8
Packaging group: II
Correct technical name: FORMIC ACID

Sea transport IMDG

UN: 1779

Class: 8/II
Packaging group: II
Correct technical name: FORMIC ACID

Air transport ICAO-IATA-DGR

UN: 1779
Class: 8
Packaging group: II
Correct technical name: FORMIC ACID
CAO: 855
PAX: 851

15.Regulatory information

16.Other information

Full text of R phrases mentioned in sections 2 and 3

35 Causes severe burns.

The information contained herein is based on the present state of our knowledge.

It characterizes the product with regard to appropriate safety precautions. It does not represent a guaranty of the properties of the product.