

SAFETY DATA SHEET

FORMIC ACID 85%

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Compilation date: 12/11/2021

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FORMIC ACID 85%

CAS number: 64-18-6

EINECS number: 200-579-1

Product code: GPC9002

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: ZOIC PalaeoTech

Orchard House

Longburton

Sherborne

DT9 5PH

Tel: 01963 210308

Email: info@zoicpalaeotech.co.uk

1.4. Emergency telephone number

Emergency tel: 999

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Flam. Liq. 3: H226; Acute Tox. 4: H302; Acute Tox. 3: H331; Skin Corr. 1A: H314

Classification under CHIP: C: R35

Most important adverse effects: Flammable liquid and vapour. Harmful if swallowed. Causes severe skin burns and eye damage. Toxic if inhaled.

2.2. Label elements

Label elements under CLP:

Hazard statements: H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H331: Toxic if inhaled.

Signal words: Danger

Hazard pictograms: GHS02: Flame

GHS05: Corrosion

GHS06: Skull and crossbones

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Precautionary statements: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310: Immediately call a POISON CENTER or doctor.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+233: Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: FORMIC ACID 85% ACS

CAS number: 64-18-6

EINECS number: 200-579-1

Contains: Molecular Formula : CH₂O₂

Molecular Weight : 46.03 g/mol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Take immediately to hospital. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

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

Skin contact: Irritation or pain may occur at the site of contact. Severe burns may occur.

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Eye contact: Severe eye irritation.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects: No data available.

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

Immediate / special treatment: No data available.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate the area immediately. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Vent periodically. Handle and open container with care. Hygroscopic. Refrigerate before opening.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	9 mg/m ³	-	9.6 mg/m ³	-

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Face-shield.

Skin protection: Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Environmental: Do not let product enter drains. Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Boiling point/range°C: 100.80°C

upper: 57

Part.coeff. n-octanol/water: log Pow: -0.54

Relative density: 1.2 g/cm³

Flammability limits %: lower: 18

Flash point°C: 49.5

Vapour pressure: 42.00 hPa at 20 °C

pH: 2.2 at 2.2 g/l

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9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: Heat. Flames. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong bases. Powdered metals

10.6. Hazardous decomposition products

Haz. decomp. products: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	730	mg/kg
INHALATION	RAT	4H LC50	7.4	mg/l

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Based on test data
Acute toxicity (ac. tox. 3)	INH	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data

Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. Severe burns may occur.

Eye contact: Severe eye irritation.

Ingestion: No data available.

[cont...]

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Inhalation: No data available.

Delayed / immediate effects: No data available.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	46-100	mg/l
DAPHNIA	48H EC50	34.2	mg/l

12.2. Persistence and degradability

Persistence and degradability: Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Harmful to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN1779

14.2. UN proper shipping name

Shipping name: ADR/RID: FORMIC ACID

IMDG: FORMIC ACID

IATA: Formic acid

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14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: 2

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Section 15: Regulatory information

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

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H331: Toxic if inhaled.

R35: Causes severe burns.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.