

1. Identification

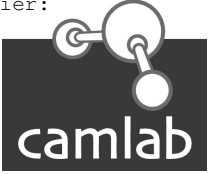
Product Code **1111324**

Product Name **FORMIC ACID 80% w/w pure**

Molecular Formula **HCOOH =46.03**

CAS Number **64-18-6**

Supplier: **CAMLAB LIMITED**
Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE



Phone **01954 233110**

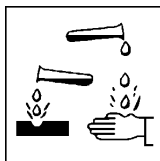
Fax **01954 233101**

Emergency Telephone **08:00-17:00 01954 233110**
24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Formic acid	64-18-6	200-579-1	80.0%	C : R35	WEL

3. Hazards Identification



Causes burns.

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. OBTAIN MEDICAL ATTENTION URGENTLY.

Inhalation Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. If conscious place in a sitting position. OBTAIN MEDICAL ATTENTION URGENTLY.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. Vapour-air mixtures are explosive.

Extinguishing Media Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.

Unsuitable Media Do not use water jet.

6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash to drain with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use.

8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³
Formic acid	64-18-6	5.000	9.600	-	-	-	-	-	-

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hands	Use PVC gauntlets.
Eyes	Use chemical full face shield.
Skin	Wear PVC oversuit.

9. Physical & Chemical Properties

Appearance	Clear colourless liquid.
Odour	Pungent and intensely irritating.
pH	Not available
Boiling point	100.8 °C
Melting point	30.0- °C
Flash point	69.0 °C(Closed cup)
Upper Flammable Limit	38.0 %
Lower Flammable Limit	12.0 %
Auto Ignition	540.0 °C
Explosive properties	Slight.
Oxidising Properties	No.
Vapour Pressure	40 mmHg @ 20 C
Relative Density	1.1180
Water Solubility	Completely miscible in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
Materials to Avoid	Alkalis. Strong oxidising agents. Mineral acids.

10. Stability & Reactivity (continued)

Hazardous None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.
Decomposition Products

11. Toxicological Information

Eyes The vapour is irritating to the eyes. The liquid and solutions will cause severe burns. Damage can range from severe irritation and corneal scarring to permanent blindness.

Skin The liquid and solutions will cause severe burns. Repeated exposure may cause dermatitis.

LD50 Skin Not available

Ingest Causes severe corrosion of the mouth, throat and gastro-intestinal tract.

LD50 Ingest Oral Rat 1210 mg/Kg

Inhalation Exposure to vapour concentrations above the occupational exposure limits will produce severe irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour may seriously damage the membranes lining the nose, throat and upper respiratory tract.

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Other Information The irritant effect provides warning that control of exposure is needed.

12. Ecological

Readily bio-degraded in the environment. Slightly toxic to aquatic species but is unlikely to bioaccumulate.

13. Disposal Considerations

Disposal Methods Dispose of in a licensed incinerator. Do not dispose of as domestic waste.

Contaminated Packaging Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

14. Transport Information

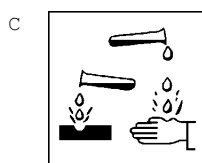
Proper Shipping Name Formic Acid
UN Number 1779
UN Classification 8 Corrosive
Subsidiary Risk 3 Flammable liquid
Flash Point 69.0 °C(Closed cup)
Packing Group II
Transport Category 2
Marine pollutant No
ADR Hazard ID 80



15. Regulatory Information

Labelling Corrosive.
Classification

Label Symbols



Risk & safety Phrases Causes burns. Keep out of reach of children. Do not breath vapour. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

15. Regulatory Information (continued)

EEC Number

200-579-1

16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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Data reviewed and PDF file generated: 17/03/10.

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