

1. PRODUCT AND COMPANY IDENTIFICATION

GHS Product Name: Malic acid 4-Me ester
Product code: CFN97130
Company: Wuhan ChemFaces Biochemical CO., Ltd.
Address: No. 83, Checheng South Rd., Wuhan Economic and Technological Development Zone, Wuhan, Hubei 430056, PRC
Tel: +86-27-84237783
Fax: +86-27-84254680
Website: www.chemfaces.com
E-mail: service@chemfaces.com

2. HAZARDS IDENTIFICATION

2.1 GHS classification
PHYSICAL HAZARDS Not classified
HEALTH HAZARDS Not classified
ENVIRONMENTAL HAZARDS Not classified

2.2 GHS label elements, including precautionary statements
Pictograms or hazard symbols None
Signal word No signal word
Hazard statements None
Precautionary statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Malic acid 4-Me ester
CAS#: 66178-02-7
Purity: >=98%
Formula: C₅H₈O₅
Molecular Weight: 148.1
Hazard Symbols:
Risk Phrases:

4. FIRST AID MEASURES

4.1 Description of first aid measures
Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult a doctor.
Skin:
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a doctor.
Ingestion:
Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Consult a doctor.
Inhalation:
Remove from exposure and move to fresh air immediately. Consult a doctor.

4.2 Indication of immediate medical attention and special treatment needed
Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing

Media: Dry chemical, foam, water spray, carbon dioxide.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.

5.2 Special protective:

equipment for firefighters: When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 General Information:

Use proper personal protective equipment as indicated in Section 8.

6.4 Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete.

7. HANDLING and STORAGE

7.1 Precautions for safe handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Storage:

Store in a well closed container. Protected from air and light, refrigerate or freeze.(2-8°C)

7.3 Specific end uses

Use in a laboratory fume hood where possible. Refer to employer is COSHH risk assessment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Control parameters: Not set up

8.2 Personal protective equipment:

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Wear safety glasses and chemical goggles if splashing is possible.

Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

- a) Appearance
Cryst.
- b) Odour
no data available
- c) Odour Threshold
no data available
- d) pH
no data available
- e) Melting point/freezing point
no data available

- f) Initial boiling point and boiling range
no data available
- g) Flash point
no data available
- h) Evaporation rate
no data available
- i) Flammability (solid, gas)
no data available
- j) Flammability or explosive limits
no data available
- k) Vapour pressure
no data available
- l) Vapour density
- m) Relative density no data available
- n) Water solubility
no data available
- o) Partition coefficient:
no data available
- p) Autoignition temperature
no data available
- q) Decomposition temperature
no data available
- r) Viscosity
no data available
- s) Explosive properties
no data available
- t) Oxidizing properties
no data available

10 - STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical Stability

Stable under normal temperatures and pressures.

10.3 Conditions to Avoid

Incompatible materials, strong oxidants, heat.

10.4 Incompatibilities with Other Materials

Strong oxidising/reducing agents, strong acids/alkalis.

10.5 Hazardous Decomposition Products

Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

10.6 Hazardous Polymerization

Has not been reported.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available

NTP = No data available

Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Toxicity:no data available

Persistence and degradability:no data available

Bioaccumulative potential:no data available

Mobility in soil:no data available

Results of PBT and vPvB assessment:no data available
Other adverse effects:May be harmful to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORT INFORMATION

14.1 Hazards Class: Does not meet the criteria for classification as hazardous for transport.

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION

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

no data available

15.2 Chemical Safety Assessment

no data available

16. ADDITIONAL INFORMATION

This MSDS above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

End of safety data sheet