

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name

Product code : Fumaric Acid : F0067

Manufacturer or supplier's details

Company : Zhejiang Norbidar Biomedicine Co., LTD.

Address : NO.356,Luohuan Road,shanhu Town,shengzhou City,Zhejiang Province

Telephone : 0575-83035555

Website : www.norbidar.com

Emergency telephone : 0575-83122866

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance : Solid form Color : white

Causes mild skin irritation. Causes serious eye irritation. Harmful to aquatic life.

GHS Classification

Skin corrosion/irritation : Category 3

Serious eye damage/eye irritation : Category 2A

Short-term (acute) aquatic hazard : Category 3

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H316 Causes mild skin irritation.

H319 Causes serious eye irritation.



H402 Harmful to aquatic life.

Precautionary Statements :

Prevention:

P264 Wash skin thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Physical and chemical hazards

Not classified based on available information.

Health hazards

Causes mild skin irritation. Causes serious eye irritation. Environmental hazards

Harmful to aquatic life.

Other hazards which do not result in classification None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS RN	Concentration (% w/w)
Fumaric Acid	110-17-8	99.5

4. FIRST AID MEASURES

If inhaled : Remove person to fresh air and keep comfortable for breathing.

Get medical advice/ attention if you feel unwell.



In case of skin contact : Take off all contaminated clothing immediately.

If on skin, rinse well with water.

If skin irritation occurs: Get medical advice/ attention.

In case of eye contact : Rinse with plenty of water.

If easy to do, remove contact lens, if worn.

If eye irritation persists: Get medical advice/ attention.

If swallowed : Get medical advice/ attention.

Rinse mouth.

Most important symptoms and effects, both acute and delayed

nd : None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry powder, Foam, Water spray, Carbon dioxide (CO2)

Specific hazards during fire

fighting

No information available.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circum-

stances and the surrounding environment.

Immediately evacuate personnel to safe areas.

Remove undamaged containers from fire area if it is safe to do so.

Special protective equipment for

fire-fighters

Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency pro-

cedures

Wear suitable protective equipment.

Keep people away from and upwind of spill/leak.

Entry to non-involved personnel should be controlled around the

leakage area by roping off, etc.

Environmental precautions : Prevent product from entering drains.

Methods and materials for con-

cleaning up

Pick up and arrange disposal without creating dust. tainment and

7. HANDLING AND STORAGE

Handling

Technical measures : Prevent dispersion of dust.

Local/Total ventilation : Ensure adequate ventilation.



Use a local exhaust ventilation.

Advice on safe handling : Avoid contact with skin, eyes and clothing.

Wear personal protective equipment.

Wash hands and face thoroughly after handling.

Avoidance of contact

Oxidizing agents, Reducing agents, Bases, Amines

Storage

Conditions for safe storage : Keep container tightly closed.

Store in a cool and shaded area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Install a closed system or local exhaust.

Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection : Dust mask

Eye/face protection : Safety glasses

Face-shield

Skin and body protection : Protective suit

Hand protection : Protective gloves

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Color : white

Odor : No data available

Odor Threshold : No data available

pH : 2.2 - 2.6

(aqueous suspension)

Melting point/freezing point : 287 °C

Boiling point/boiling range : No data available

Flash point : No data available Evaporation rate : No data available



Flammability : No data available

Upper explosion limit / Upper flammability limit : 40 %(V)Lower explosion limit / Lower flammability limit : 3 %(V)

Vapor pressure : 0.000021 kPa (25 °C)

Solubility(ies)

Water solubility : 3.0g/L very slightly soluble (25 °C)

Solubility in other solvents : soluble

Solvent: Ethanol

slightly soluble Solvent: Acetone

very slightly soluble Solvent: Ether

insoluble

Solvent: Benzene

Partition coefficient: n- octanol/water : 0.46 Autoignition temperature : 375 °C

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Molecular weight : 116.07 g/mol

10. STABILITY AND REACTIVITY

Reactivity : No data available

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Dust may form explosive mixture in air.

Conditions to avoid : Electrostatic discharge

Incompatible materials : Oxidizing agents, Reducing agents, Bases, Amines

Hazardous decomposition prod- ucts : Carbon monoxide, Carbon dioxide (CO₂)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:





Fumaric Acid:

Acute oral toxicity : LD50 (Rat): 6,800 mg/kg

Assessment: The substance or mixture has no acute oral toxicity

Acute toxicity (other routes of : LD50 (Mouse): 100 mg/kg

administration) Application Route: Intraperitoneal injection

Skin corrosion/irritation

Product:

Result : Mild skin irritation

Components:

Fumaric Acid:

Result : Mild skin irritation

Serious eye damage/eye irritation

Product:

Result : Eye irritation

Components:

Fumaric Acid:

Result : Eye irritation

Respiratory or skin sensitiza- : No information available.

tion

Germ cell mutagenicity : No information available.

Carcinogenicity : No information available.

Reproductive toxicity : No information available.

STOT-single exposure : No information available.

STOT-repeated exposure : No information available.

Repeated dose toxicity : No information available.



Aspiration toxicity : No information available.

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity Harmful to aquatic life.

Components:

Fumaric Acid:

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Persistence and degradability

No data available

Bioaccumulative potential

Components:

Fumaric Acid:

Partition coefficient: n-: 0.46

octanol/water

Mobility in soil

Components:

Fumaric Acid:

Distribution among environmen- : Koc: 7

tal compartments

Other adverse effects

No data available

15. REGULATORY INFORMATION

The ingredients of this product are reported in the following inventories:



CH BAGREG : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AICS : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Revision Date : 2025/08/20

Disclaimer

This SDS was prepared sincerely based on the information obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investi- gate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are sup- posed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling operations, sufficient care should be taken, in addition to the safety measures suitable for the given situation. All chemical products should be treated with the recognition of "having unknown haz- ards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with spe- cialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.