

Safety data sheet

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

Identification of the product

Catalogue No.: 100091
Product name: Adipic acid powder

Manufacturer/supplier identification

Company: Qingdao Easthony Inc
Regional representation: This information is given on the authorised Safety Data Sheet for your country.
Emergency telephone No.: 0532-80927565

2. Composition/information on ingredients

CAS-No.:	124-04-9	EC-Index-No.:	607-144-00-9
Molar mass:	146.14	EC-No.:	204-673-3
Molecular formula:	C ₆ H ₁₀ O ₄		

3. Hazards identification

Irritating to eyes.

4. First aid measures

After inhalation: fresh air.
After skin contact: wash off with plenty of water. Remove contaminated clothing.
After eye contact: rinse out with plenty of water with the eyelid held wide open.
Summon eye specialist.
After swallowing: make victim drink plenty of water, induce vomiting, summon doctor.

5. Fire-fighting measures

Suitable extinguishing media:
Water, CO₂, foam, powder.

Special risks:
Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:
Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:
Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

6. Accidental release measures

Person-related precautionary measures:
Avoid generation of dusts; do not inhale dusts.

Procedures for cleaning / absorption:
Take up dry. Forward for disposal. Clean up affected area.

Merck Safety Data Sheet

Catalogue No.: 100091
Product name: Adipic acid powder

7. Handling and storage

Handling:

No further requirements.

Storage:

Tightly closed. Dry. At +5°C to +30°C.

8. Exposure controls/personal protection

Personal protective equipment:

Respiratory protection: required when dusts are generated.

Eye protection: required

Hand protection: required

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Industrial hygiene:

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.

9. Physical and chemical properties

Form: solid
Colour: white
Odour: odourless

pH value
at 25 g/l H₂O

(25 °C) 2.7

Melting point

150 - 153 °C

Boiling point

(13 hPa) ~ 205 °C

Ignition temperature

405 °C

Flash point

196 °C

Explosion limits lower
upper

not available

not available

0.4 hPa

Vapour pressure (151 °C)

not available

Relative vapour density_

not available
~ 700 kg/m³

Density

24 g/l

Bulk density

Solubility in

0.093

water

(25 °C)

log P(oct):

(25 °C)

DIN 51794
closed cup

Catalogue No.: 100091
Product name: Adipic acid extra pure fine powder DAB,FCC,E 355

10. Stability and reactivity

Conditions to be avoided

none

Substances to be avoided

bases

Hazardous decomposition products

no information available

Further information

dust explosion possible

11. Toxicological information

Acute toxicity

LD₅₀ (oral, rat): ~ 5700 mg/kg .

Further toxicological information

After inhalation of dust: mucosal irritations.

After skin contact: Slight irritations.

After eye contact: Irritations.

Further data

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Degradability:

Biodegradation: > 90 % .

Readily biodegradable.

Behavior in environmental compartments:

Distribution: log P(oct): 0.093 (25 °C) .

No bioaccumulation is to be expected (log P(o/w) <1).

Ecotoxic effects:

Fish toxicity: P.promelas LC₅₀: 97 mg/l /96 h ; L.idus LC₅₀: 511 mg/l /48 h .

Daphnia toxicity: Daphnia magna EC₅₀: 86 mg/l /48 h .

Maximum permissible toxic concentration: algae IC₅: > 100 mg/l .

Further ecologic data:

Degradability:

BOD₅: 0.598 g/g ; BOD 36 % of ThOD /5 d ; ThOD: 1.423 g/g .

No ecological problems are to be expected when the product is handled and used with due care and attention.

Catalogue No.: 100091
Product name: Adipic acid extra pure fine powder DAB,FCC,E 355

13. Disposal considerations

Product:

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

Labelling according to EC Directives

Symbol:	Xi	Irritant
R-phrases:	36	Irritating to eyes.
S-phrases:	---	
EC-No.:	204-673-3	EC label

16. Other information

Reason for alteration

Change in supplement to physical/chemical parameters.
Addition in the chapter toxicology.
Addition in the chapter ecology.
General update.

Date of issue: 19.10.2020 Supersedes edition of 12.05.2020

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.