

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 09.28.2017

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Adipic Acid

SECTION 1: Identification

Product identifier

Product name: Adipic Acid

Product code: S25124

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

Supplier:

AquaPhoenix Scientific

860 Gitts Run Road

Hanover

PA 17331

(717) 632-1291

Fisher Science Education

6771 Silver Crest Road

Nazareth

PA 18064

800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation

Precautionary statements:

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
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CAS number: 124-04-9	Adipic Acid	100
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Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Remove contact lens(es) if able to do so during rinsing

Seek medical attention if irritation persists or if concerned

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

May form corrosive mixtures with water

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

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Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.
Store in corrosive resistant container with a resistant inner lining.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Adipic Acid	124-04-9	ACGIH TLV TWA 5 mg/m ³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

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Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White powder
Odor	Odorless
Odor threshold	No information available.
pH	3.2 (0.1% solution)
Melting point/freezing point	152°C
Initial boiling point/range	337.5°C at 760 mmHg
Flash point (closed cup)	196°C
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper flammability/explosive limit	No information available.
Lower flammability/explosive limit	No information available.
Vapor pressure	0.073 mm Hg at 18.5°C
Vapor density	5.04 (air=1)
Density	No information available.
Relative density	1.360 g/cm ³ at 20°C
Solubilities	2.0 g/100g at 25°C
Partition coefficient (n-octanol/water)	No information available.
Auto/Self-ignition temperature	400 °C
Decomposition temperature	No information available.
Dynamic viscosity	No information available.
Kinematic viscosity	No information available.
Explosive properties	No information available.
Oxidizing properties	No information available.

Other information

Molecular Weight	146.14
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SECTION 10: Stability and reactivity

Reactivity:

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Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Dust generation. Aqueous solutions are very mildly corrosive to most metals.

Incompatible materials:

Strong oxidizing agents, strong reducing agents, strong bases.

Hazardous decomposition products:

Oxides of carbon.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
Adipic Acid	Result: Irritating (Rabbit)

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

Fish	Fish: Bluegill/Sunfish: LC50 = 97-330 mg/L; 24-96 Hr.; Static conditions, 18-22 degrees C The Koc of adipic acid is estimated as approximately 26, using a measured log Kow of 0.08 and a regression-derived equation. According to a recommended classification scheme, this estimated Koc value suggests that adipic acid is expected to have very high mobility in soil.
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Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data:

Readily biodegradable.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data:

High in soil.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities Dilute with water and flush to sewer

SECTION 14: Transport information

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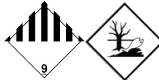
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United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Adipic acid)
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None
Reportable quantity	5000 lbs.

International Maritime Dangerous Goods (IMDG)

UN number	UN 3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (Adipic acid)
UN transport hazard class(es)	9 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

124-04-9	Adipic Acid	Listed
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Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
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No	No	No	No	No
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SARA Section 302 extremely hazardous substances: Not listed.

SARA Section 313 toxic chemicals: Not listed.

CERCLA:

124-04-9	Adipic Acid	Listed	5000 lbs.
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RCRA: Not listed.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

124-04-9	Adipic Acid	Listed
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New Jersey Right to Know:

124-04-9	Adipic Acid	Listed
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New York Right to Know:

124-04-9	Adipic Acid	Listed
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Pennsylvania Right to Know:

124-04-9	Adipic Acid	Listed
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California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 1-1-0

HMIS: 1-1-0

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End of Safety Data Sheet