

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

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:

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

##### Supplier:

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 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

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| Identification          | Name        | Weight % |
|-------------------------|-------------|----------|
| CAS number:<br>124-04-9 | Adipic Acid | 100      |

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

#### 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 ingestion:

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 available.

#### Delayed symptoms and effects:

Not determined or not available.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## SECTION 5: Fire-fighting 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

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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:

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 <sup>3</sup> |

### 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.

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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

#### 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

|   |                                 |
|---|---------------------------------|
| <b>Appearance (physical state, color):</b>      | White powder                    |
| <b>Odor:</b>                                    | Odorless                        |
| <b>Odor threshold:</b>                          | No information available.       |
| <b>pH-value:</b>                                | 3.2 (0.1% solution)             |
| <b>Melting/Freezing point:</b>                  | 152°C                           |
| <b>Boiling point/range:</b>                     | 337.5°C at 760 mmHg             |
| <b>Flash point:</b>                             | 196°C                           |
| <b>Evaporation rate:</b>                        | No information available.       |
| <b>Flammability (solid, gaseous):</b>           | No information available.       |
| <b>Explosion limit upper:</b>                   | No information available.       |
| <b>Explosion limit lower:</b>                   | No information available.       |
| <b>Vapor pressure:</b>                          | 0.073 mm Hg at 18.5°C           |
| <b>Vapor density:</b>                           | 5.04 (air=1)                    |
| <b>Density:</b>                                 | No information available.       |
| <b>Relative density:</b>                        | 1.360 g/cm <sup>3</sup> at 20°C |
| <b>Solubilities:</b>                            | 2.0 g/100g at 25°C              |
| <b>Partition coefficient (n-octanol/water):</b> | No information available.       |
| <b>Auto/Self-ignition temperature:</b>          | 400 °C                          |
| <b>Decomposition temperature:</b>               | No information available.       |
| <b>Dynamic viscosity:</b>                       | No information available.       |

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|                             |                           |
|-----------------------------|---------------------------|
| <b>Kinematic viscosity:</b> | No information available. |
| <b>Explosive properties</b> | No information available. |
| <b>Oxidizing properties</b> | No information available. |

### Other information

|                         |        |
|-------------------------|--------|
| <b>Molecular Weight</b> | 146.14 |
|-------------------------|--------|

## SECTION 10: Stability and reactivity

### Reactivity:

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.

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## Adipic Acid

**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)

**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. |
|------|---|

**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.

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### 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.

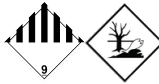
## SECTION 13: Disposal considerations

### Disposal methods:

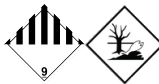
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities Dilute with water and flush to sewer

## SECTION 14: Transport information

### Canadian Transportation of Dangerous Goods (TDG)

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

### International Maritime Dangerous Goods (IMDG)

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

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

|                                      |               |
|--------------------------------------|---------------|
| <b>UN number</b>                     | Not regulated |
| <b>UN proper shipping name</b>       | Not regulated |
| <b>UN transport hazard class(es)</b> | None          |
| <b>Packing group</b>                 | None          |
| <b>Environmental hazards</b>         | None          |

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|                              |      |
|------------------------------|------|
| 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

### Canada regulations

#### Domestic substances list (DSL):

|          |             |        |
|----------|-------------|--------|
| 124-04-9 | Adipic Acid | Listed |
|----------|-------------|--------|

Non-domestic substances list (NDSL): Not determined.

## SECTION 16: Other information

Abbreviations and Acronyms: None

### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. 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**