

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Acetylsalicylic acid

Product Number : A5376  
Brand : Sigma

Supplier : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052  
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555

Preparation Information : Sigma-Aldrich Corporation  
Product Safety - Americas Region  
1-800-521-8956

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

##### OSHA Hazards

Target Organ Effect, Harmful by ingestion., Irritant

##### Target Organs

Blood

##### GHS Classification

Acute toxicity, Oral (Category 4)  
Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Specific target organ toxicity - single exposure (Category 3)

##### GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

##### HMIS Classification

Health hazard: 2  
Chronic Health Hazard: \*  
Flammability: 1

**Physical hazards:** 0  
**NFPA Rating**  
**Health hazard:** 2  
**Fire:** 1  
**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin** Harmful if absorbed through skin. Causes skin irritation.  
**Eyes** Causes eye irritation.  
**Ingestion** Harmful if swallowed.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Synonyms** : ASA  
O-Acetylsalicylic acid  
2-Acetoxybenzoic acid  
Aspirin

**Formula** : C<sub>9</sub>H<sub>8</sub>O<sub>4</sub>  
**Molecular Weight** : 180.16 g/mol

Component		Concentration
<b>O-Acetylsalicylic acid</b>		
CAS-No.	50-78-2	-
EC-No.	200-064-1	-

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**4. FIRST AID MEASURES**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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**5. FIREFIGHTING MEASURES**

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental precautions

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
O-Acetylsalicylic acid	50-78-2	TWA	5 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		TWA	5 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	5 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits

### Personal protective equipment

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	crystalline
Colour	white

### Safety data

pH	3.5 at 2.5 g/l at 20 °C (68 °F)
Melting point/freezing point	Melting point/range: 134 - 136 °C (273 - 277 °F) - lit.

Boiling point	no data available
Flash point	250 °C (482 °F)
Ignition temperature	500 °C (932 °F)
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	log Pow: 1.19
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

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## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

### Conditions to avoid

Heat. Exposure to light.

### Materials to avoid

Strong oxidizing agents, Strong acids, Strong bases

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

### Thermal decomposition

140 °C

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 1,500 mg/kg

#### Inhalation LC50

no data available

#### Dermal LD50

no data available

#### Other information on acute toxicity

LD50 Intraperitoneal - rat - 340 mg/kg

LD50 Intraperitoneal - mouse - 167 mg/kg

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

- |                   |   |
|-------------------|---|
| <b>Inhalation</b> | May be harmful if inhaled. Causes respiratory tract irritation. |
| <b>Ingestion</b>  | Harmful if swallowed.   |
| <b>Skin</b>       | Harmful if absorbed through skin. Causes skin irritation.       |
| <b>Eyes</b>       | Causes eye irritation.  |

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**

no data available

**Additional Information**

RTECS: VO0700000

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**12. ECOLOGICAL INFORMATION**

**Toxicity**

- |   |   |
|---|---|
| Toxicity to fish                                    | LC50 - Leuciscus idus (Golden orfe) - > 1,000 mg/l - 48 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia - > 100 mg/l - 48 h                        |
| Toxicity to bacteria                                | LC50 - Bacteria - > 10,000 mg/l - 48 h                    |

**Persistence and degradability**

- |                  |                                       |
|------------------|---------------------------------------|
| Biodegradability | Remarks: Expected to be biodegradable |
|------------------|---------------------------------------|

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION****OSHA Hazards**

Target Organ Effect, Harmful by ingestion., Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

	CAS-No.	Revision Date
O-Acetylsalicylic acid	50-78-2	1994-04-24

**Pennsylvania Right To Know Components**

	CAS-No.	Revision Date
O-Acetylsalicylic acid	50-78-2	1994-04-24

**New Jersey Right To Know Components**

	CAS-No.	Revision Date
O-Acetylsalicylic acid	50-78-2	1994-04-24

**California Prop. 65 Components**

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	50-78-2	1990-07-01
O-Acetylsalicylic acid		

**16. OTHER INFORMATION**

**Further information**

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