

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.3

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Salicylic acid

Product Number : BP775

Brand : Sigma-Aldrich

REACH No. : 01-2119486984-17-XXXX

CAS-No. : 69-72-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3

CHEMIKART

### 1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Serious eye damage (Category 1), H318

Reproductive toxicity (Category 2), H361d

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word : Danger

|                                |                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Hazard statement(s)            |                                                                                                                                  |
| H302                           | Harmful if swallowed.                                                                                                            |
| H318                           | Causes serious eye damage.                                                                                                       |
| H361d                          | Suspected of damaging the unborn child.                                                                                          |
| Precautionary statement(s)     |                                                                                                                                  |
| P202                           | Do not handle until all safety precautions have been read and understood.                                                        |
| P264                           | Wash skin thoroughly after handling.                                                                                             |
| P280                           | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                    |
| P301 + P312                    | IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.                                                                   |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313                    | IF exposed or concerned: Get medical advice/ attention.                                                                          |
| Supplemental Hazard Statements | none                                                                                                                             |

### Reduced Labeling (<= 125 ml)

Pictogram

|                                |                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Signal Word                    | Danger                                                                                                                           |
| Hazard statement(s)            |                                                                                                                                  |
| H318                           | Causes serious eye damage.                                                                                                       |
| H361d                          | Suspected of damaging the unborn child.                                                                                          |
| Precautionary statement(s)     |                                                                                                                                  |
| P202                           | Do not handle until all safety precautions have been read and understood.                                                        |
| 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. |
| P308 + P313                    | IF exposed or concerned: Get medical advice/ attention.                                                                          |
| Supplemental Hazard Statements | none                                                                                                                             |

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |                                                |
|------------------|------------------------------------------------|
| Formula          | : C <sub>7</sub> H <sub>6</sub> O <sub>3</sub> |
| Molecular weight | : 138,12 g/mol                                 |
| CAS-No.          | : 69-72-7                                      |
| EC-No.           | : 200-712-3                                    |

| Component | Classification | Concentration |
|-----------|----------------|---------------|
|-----------|----------------|---------------|

| <b>Salicylic acid</b> |              |                           |          |
|-----------------------|--------------|---------------------------|----------|
| CAS-No.               | 69-72-7      | Acute Tox. 4; Eye Dam. 1; | <= 100 % |
| EC-No.                | 200-712-3    | Repr. 2; H302, H318,      |          |
| Index-No.             | 607-732-00-5 | H361d                     |          |

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Tightly closed. Dry.

#### Storage stability

Recommended storage temperature

2 - 8 °C

#### Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

#### Derived No Effect Level (DNEL)

| Application Area        | Routes of exposure | Health effect              | Value                |
|-------------------------|--------------------|----------------------------|----------------------|
| Worker DNEL, longterm   | dermal             | Long-term systemic effects |                      |
| Worker DNEL, longterm   | inhalation         | Local and systemic effects | 16 mg/m <sup>3</sup> |
| Consumer DNEL, acute    | oral               | Acute systemic effects     |                      |
| Consumer DNEL, longterm | dermal             | Long-term systemic effects |                      |
| Consumer DNEL, longterm | inhalation         | Long-term systemic effects | 4 mg/m <sup>3</sup>  |
| Consumer DNEL, longterm | oral               | Long-term systemic effects |                      |

**Predicted No Effect Concentration (PNEC)**

| Compartment            | Value       |
|------------------------|-------------|
| Fresh water            | 0,2 mg/l    |
| Fresh water sediment   | 1,42 mg/kg  |
| Sea water              | 0,02 mg/l   |
| Sea sediment           | 0,142 mg/kg |
| Sewage treatment plant | 162 mg/l    |
| Soil                   | 0,166 mg/kg |

**8.2 Exposure controls****Personal protective equipment****Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

**Body Protection**

protective clothing

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                                                 |                                                                                  |
|-------------------------------------------------|----------------------------------------------------------------------------------|
| a) Physical state                               | powdercrystalline                                                                |
| b) Color                                        | white                                                                            |
| c) Odor                                         | odorless                                                                         |
| d) Melting point/freezing point                 | Melting point/range: 158 - 160 °C                                                |
| e) Initial boiling point and boiling range      | 211 °C at 27 hPa                                                                 |
| f) Flammability (solid, gas)                    | The product is not flammable.                                                    |
| g) Upper/lower flammability or explosive limits | Lower explosion limit: 1,1 %(V)                                                  |
| h) Flash point                                  | 157 °C - closed cup                                                              |
| i) Autoignition temperature                     | No data available                                                                |
| j) Decomposition temperature                    | No data available                                                                |
| k) pH                                           | 2,4 at 20 °C                                                                     |
| l) Viscosity                                    | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| m) Water solubility                             | No data available                                                                |
| n) Partition coefficient: n-octanol/water       | log Pow: 2,25 at 25 °C - Bioaccumulation is not expected.                        |
| o) Vapor pressure                               | 1 hPa at 114 °C                                                                  |
| p) Density                                      | 1,44 g/cm <sup>3</sup> at 20 °C                                                  |
| Relative density                                | No data available                                                                |
| q) Relative vapor density                       | No data available                                                                |
| r) Particle characteristics                     | No data available                                                                |
| s) Explosive properties                         | No data available                                                                |
| t) Oxidizing properties                         | none                                                                             |

### 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

#### **10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

#### **10.3 Possibility of hazardous reactions**

Risk of ignition or formation of inflammable gases or vapours with:

Fluorine

iodine

Violent reactions possible with:

Strong oxidizing agents

iron/iron-containing compounds

#### **10.4 Conditions to avoid**

Light.

Strong heating.

#### **10.5 Incompatible materials**

No data available

#### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

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### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

##### **Acute toxicity**

LD50 Oral - Rat - male - 891 mg/kg

(OECD Test Guideline 401)

Oral: Behavioral: Muscle weakness.

Acute toxicity estimate Oral - 891 mg/kg

(Calculation method)

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

##### **Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

##### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Risk of serious damage to eyes.

(Draize Test)

##### **Respiratory or skin sensitization**

No data available

##### **Germ cell mutagenicity**

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative  
Test Type: Ames test  
Test system: Escherichia coli/Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Chromosome aberration test  
Species: Mouse  
Cell type: Bone marrow  
Application Route: Intraperitoneal  
Method: OECD Test Guideline 475  
Result: negative

Test Type: sister chromatid exchange assay  
Species: Mouse  
Cell type: Bone marrow  
Application Route: Oral  
Method: US-EPA  
Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Additional Information**

**Endocrine disrupting properties**

**Product:**

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Repeated dose toxicity - Rat - male and female - Oral - 2 yr - NOAEL (No observed adverse effect level) - 50 mg/kg

Remarks: (in analogy to similar products)  
(ECHA)

The value is given in analogy to the following substances: methyl salicylate

RTECS: VO0525000

Cough, Shortness of breath, Headache, Nausea, Vomiting

Mild chronic salicylate intoxication is termed salicylism. Symptoms include: headache, dizziness, ringing in the ears, difficulty in hearing, dimness of vision, mental confusion, lassitude, drowsiness, sweating, thirst, hyperventilation, nausea, vomiting, and occasionally diarrhea. A more severe degree of salicylate intoxication is characterized by more pronounced CNS disturbances (including generalized convulsions and coma), skin eruptions, and marked alterations in acid-base balance.

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

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## SECTION 12: Ecological information

### 12.1 Toxicity

|                                                                       |                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                                      | flow-through test LC50 - Pimephales promelas (fathead minnow) - 1.370 mg/l - 96 h<br>(OECD Test Guideline 203)<br>Remarks: (in analogy to similar products)<br>The value is given in analogy to the following substances: Sodium salicylate |
| Toxicity to daphnia and other aquatic invertebrates                   | static test EC50 - Daphnia magna (Water flea) - 870 mg/l - 48 h<br>(OECD Test Guideline 202)                                                                                                                                                |
| Toxicity to algae                                                     | Growth inhibition ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h<br>(OECD Test Guideline 201)                                                                                                                            |
| Toxicity to bacteria                                                  | static test EC50 - Pseudomonas putida - 380 mg/l - 16 h<br>Remarks: (ECHA)<br>The value is given in analogy to the following substances: methyl salicylate                                                                                  |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | NOEC - Daphnia magna (Water flea) - 10 mg/l - 21 d<br>(OECD Test Guideline 202)                                                                                                                                                             |

### 12.2 Persistence and degradability

|                  |                                                                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------|
| Biodegradability | aerobic - Exposure time 4 d<br>Result: > 90 % - Inherently biodegradable.<br>(Regulation (EC) No. 440/2008, Annex, C.9) |
|------------------|-------------------------------------------------------------------------------------------------------------------------|

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

No data available

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

No data available

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### SECTION 14: Transport information

#### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

#### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

#### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user

No data available

##### Further information

Not classified as dangerous in the meaning of transport regulations.

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### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

##### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

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## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

|       |                                         |
|-------|-----------------------------------------|
| H302  | Harmful if swallowed.                   |
| H318  | Causes serious eye damage.              |
| H361d | Suspected of damaging the unborn child. |

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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