

## SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

### Salicylaldehyde

|               |                     |         |     |
|---------------|---------------------|---------|-----|
| Creation date | 10th September 2019 | Version | 3.0 |
| Revision date | 18th May 2023       |         |     |

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

- 1.1. Product identifier**
- |                      |                       |
|----------------------|-----------------------|
| Substance / mixture  | Salicylaldehyde       |
| Chemical name        | substance             |
| CAS number           | Salicylaldehyde       |
| EC (EINECS) number   | 90-02-8               |
| Registration number  | 201-961-0             |
| Other substance name | 01-2119952614-35-xxxx |
|                      | 2-Hydroxybenzaldehyde |
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
- Substance's intended use**  
Chemical production, analytical chemistry, laboratory synthesis, industrial applications.
- Substance uses advised against**  
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
- Supplier**
- |                             |  |
|-----------------------------|--|
| Name or trade name          | Ing. Petr Švec - PENTA s.r.o.                      |
| Address                     | Radiová 1122/1, Praha 10, 102 00<br>Czech Republic |
| Identification number (CRN) | 02096013   |
| VAT Reg No                  | CZ02096013   |
| Phone                       | +420 226 060 681                                   |
| E-mail                      | info@pentachemicals.eu                             |
| Web address                 | www.pentachemicals.eu                              |
- Competent person responsible for the safety data sheet**
- |        |                               |
|--------|-------------------------------|
| Name   | Ing. Petr Švec - PENTA s.r.o. |
| E-mail | info@pentachemicals.eu        |
- 1.4. Emergency telephone number**  
European emergency number: 112 112

#### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**  
**Classification of the substance in accordance with Regulation (EC) No 1272/2008**

The substance is classified as dangerous.

Acute Tox. 4, H302+H312  
Skin Irrit. 2, H315  
Eye Irrit. 2, H319  
Muta. 2, H341

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse effects on human health and the environment**

Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

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#### 2.2. Label elements

##### Hazard pictogram



##### Signal word

Warning

##### Dangerous substance

Salicylaldehyde  
(EC: 201-961-0; CAS: 90-02-8)

##### Hazard statements

|           |   |
|-----------|---|
| H315      | Causes skin irritation.                       |
| H319      | Causes serious eye irritation.                |
| H341      | Suspected of causing genetic defects.         |
| H302+H312 | Harmful if swallowed or in contact with skin. |

##### Precautionary statements

|           |   |
|-----------|---|
| P201      | Obtain special instructions before use.                             |
| P264      | Wash hands and exposed parts of the body thoroughly after handling. |
| P280      | Wear protective gloves.   |
| P308+P313 | IF exposed or concerned: Get medical advice/attention.              |
| P337+P313 | If eye irritation persists: Get medical advice/attention.           |

#### 2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

##### Chemical characterization

The substance specified below.

| Identification numbers   | Substance name                                     | Content in % weight | Classification according to Regulation (EC) No 1272/2008                              | Note |
|--|--|---------------------|---|------|
| CAS: 90-02-8<br>EC: 201-961-0<br>Registration number:<br>01-2119952614-35-<br>xxxx | <b>substance main component</b><br>Salicylaldehyde | >99                 | Acute Tox. 4, H302+H312<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Muta. 2, H341 |      |

Full text of all classifications and hazard statements is given in the section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

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#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

#### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

#### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

#### If swallowed

Provide medical treatment.

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

##### If inhaled

Not expected.

##### If on skin

Causes skin irritation.

##### If in eyes

Causes serious eye irritation.

##### If swallowed

Irritation, nausea.

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

Symptomatic treatment.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

##### Unsuitable extinguishing media

Water - full jet.

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

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### SECTION 6: Accidental release measures

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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

#### 6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

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#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Do not eat, drink or smoke when using this product. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

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

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

##### 7.3. Specific end use(s)

not available

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

##### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

##### Eye/face protection

Protective goggles.

##### Skin protection

Hand protection: Protective gloves resistant to the product (butyl rubber, Viton). When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

##### Respiratory protection

Half-mask with anti-dust filter when the exposition limits of substances are exceeded or in the location with insufficient ventilation.

##### Thermal hazard

Not available.

##### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

#### SECTION 9: Physical and chemical properties

##### 9.1. Information on basic physical and chemical properties

|  |                          |
|--|--------------------------|
| Physical state   | liquid                   |
| Colour   | yellowish                |
| Odour  | After bitter almonds     |
| Melting point/freezing point                             | -7 °C                    |
| Boiling point or initial boiling point and boiling range | data not available       |
| Flammability   | data not available       |
| Lower and upper explosion limit                          | data not available       |
| Flash point  | data not available       |
| Auto-ignition temperature                                | data not available       |
| Decomposition temperature                                | data not available       |
| pH   | 6-8 (undiluted at 20 °C) |
| Kinematic viscosity                                      | data not available       |
| Solubility in water                                      | soluble                  |
| Partition coefficient n-octanol/water (log value)        | data not available       |
| Vapour pressure  | data not available       |
| Density and/or relative density                          | data not available       |
| Relative vapour density                                  | data not available       |

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Particle characteristics data not available

**9.2. Other information**

not available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

The substance is non-flammable.

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Unknown.

**10.4. Conditions to avoid**

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

**10.5. Incompatible materials**

Protect against strong acids, bases and oxidizing agents.

**10.6. Hazardous decomposition products**

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

No toxicological data is available for the substance.

**Acute toxicity**

Harmful if swallowed or in contact with skin.

Salicylaldehyde

| Route of exposure | Parameter | Method   | Value     | Exposure time | Species                 | Sex |
|-------------------|-----------|----------|-----------|---------------|-------------------------|-----|
| Oral              | LD50      | OECD 423 | 500 mg/kg |               | Rat (Rattus norvegicus) |     |

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

Suspected of causing genetic defects.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - single exposure**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - repeated exposure**

Based on available data the classification criteria are not met.

**Aspiration hazard**

Based on available data the classification criteria are not met.

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#### 11.2. Information on other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### SECTION 12: Ecological information

#### 12.1. Toxicity

##### Acute toxicity

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| Parameter        | Method   | Value     | Exposure time | Species                          | Environment |
|------------------|----------|-----------|---------------|----------------------------------|-------------|
| LC <sub>50</sub> | OECD 203 | 1.62 mg/l | 96 hours      | Fish ( <i>Oryzias latipes</i> )  |             |
| EC <sub>50</sub> |          | 2.6 mg/l  | 48 hours      | Daphnia ( <i>Daphnia magna</i> ) |             |

#### 12.2. Persistence and degradability

not available

#### 12.3. Bioaccumulative potential

Not available.

#### 12.4. Mobility in soil

Not available.

#### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

#### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

#### 12.7. Other adverse effects

Not available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

##### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

not subject to transport regulations

#### 14.2. UN proper shipping name

not relevant

#### 14.3. Transport hazard class(es)

not relevant

#### 14.4. Packing group

not relevant

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#### 14.5. Environmental hazards

not relevant

#### 14.6. Special precautions for user

not available

#### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

### SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

### SECTION 16: Other information

#### A list of standard risk phrases used in the safety data sheet

|           |   |
|-----------|---|
| H315      | Causes skin irritation.                       |
| H319      | Causes serious eye irritation.                |
| H341      | Suspected of causing genetic defects.         |
| H302+H312 | Harmful if swallowed or in contact with skin. |

#### Guidelines for safe handling used in the safety data sheet

|           |   |
|-----------|---|
| P201      | Obtain special instructions before use.                             |
| P264      | Wash hands and exposed parts of the body thoroughly after handling. |
| P280      | Wear protective gloves.   |
| P308+P313 | IF exposed or concerned: Get medical advice/attention.              |
| P337+P313 | IF eye irritation persists: Get medical advice/attention.           |

#### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

#### Key to abbreviations and acronyms used in the safety data sheet

|                  |   |
|------------------|---|
| ADR              | European agreement concerning the international carriage of dangerous goods by road               |
| BCF              | Bioconcentration Factor   |
| CAS              | Chemical Abstracts Service  |
| CLP              | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures |
| EC               | Identification code for each substance listed in EINECS   |
| EC <sub>50</sub> | Concentration of a substance when it is affected 50% of the population                            |
| EINECS           | European Inventory of Existing Commercial Chemical Substances                                     |
| EmS              | Emergency plan  |
| EU               | European Union  |
| EuPCS            | European Product Categorisation System  |
| IATA             | International Air Transport Association   |
| IBC              | International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals       |

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|                     |   |
|---------------------|---|
| ICAO                | International Civil Aviation Organization   |
| IMDG                | International Maritime Dangerous Goods  |
| IMO                 | International Maritime Organization   |
| INCI                | International Nomenclature of Cosmetic Ingredients  |
| ISO                 | International Organization for Standardization  |
| IUPAC               | International Union of Pure and Applied Chemistry   |
| LC <sub>50</sub>    | Lethal concentration of a substance in which it can be expected death of 50% of the population    |
| LD <sub>50</sub>    | Lethal dose of a substance in which it can be expected death of 50% of the population             |
| log K <sub>ow</sub> | Octanol-water partition coefficient   |
| OEL                 | Occupational Exposure Limits  |
| PBT                 | Persistent, Bioaccumulative and Toxic   |
| ppm                 | Parts per million   |
| REACH               | Registration, Evaluation, Authorisation and Restriction of Chemicals                              |
| RID                 | Agreement on the transport of dangerous goods by rail   |
| UN                  | Four-figure identification number of the substance or article taken from the UN Model Regulations |
| UVCB                | Substances of unknown or variable composition, complex reaction products or biological materials  |
| VOC                 | Volatile organic compounds  |
| vPvB                | Very Persistent and very Bioaccumulative  |
| Acute Tox.          | Acute toxicity  |
| Eye Irrit.          | Eye irritation  |
| Muta.               | Germ cell mutagenicity  |
| Skin Irrit.         | Skin irritation   |

#### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### The changes (which information has been added, deleted or modified)

The version 3.0 replaces the SDS version from 29 April 2022. Changes were made in sections 2, 11, 12, 15 and 16.

#### More information

Classification procedure - calculation method.

#### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.