

OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599

Email : info@ottokemi.com, Web : www.ottokemi.com

-----ISO 9001: 2015-----

MATERIAL SAFETY DATA SHEET

1. Identification

1.1 GHS Product identifier

Salicylic acid, 99%
Code S 1265

2. Hazard identification

2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

Serious eye damage, Category 1

2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed
H318 Causes serious eye damage

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/\u2026 if you feel unwell.
P330 Rinse mouth.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor/\u2026

Storage

none

Disposal

P501 Dispose of contents/container to ...

2.3 Other hazards which do not result in classification

none

3. Composition/information on ingredients

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
salicylic acid	salicylic acid	69-72-7	none	100%

4. First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

Fresh air, rest. Refer for medical attention.

In case of skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

In case of eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

If swallowed

Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention .

4.2 Most important symptoms/effects, acute and delayed

Inhalation of dust irritates nose and throat. Vomiting may occur spontaneously if large amounts are swallowed. Contact with eyes causes irritation, marked pain, and corneal injury which should heal. Prolonged or repeated skin contact may cause marked irritation or even a mild burn. (USCG, 1999)

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Management of acute salicylic acid poisoning includes prevention of absorption, correction of acid-base, fluid and electrolyte imbalance and enhancing of the drug elimination. Respiratory alkalosis needs no specific treatment, but severe acidosis requires at least a partial correction with sodium bicarbonate. Hypokalemia may be aggravated by administration of sodium bicarbonate. Thus, potassium may need repletion. However, if large amounts of water and electrolytes are given to the patient, the sodium and water load may precipitate pulmonary edema. Sedative and depressive drugs must be avoided. Tetany may be corrected with the use of calcium gluconate. Due to the delayed effects of salicylate overdose, the patient must be kept under observation for at least 24 hours.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

WATER, FOAM, CARBON DIOXIDE, DRY CHEM

5.2 Specific hazards arising from the chemical

Special Hazards of Combustion Products: Irritating vapors of unburned material and phenol may form in fire. Behavior in Fire: Sublimes and forms vapor or dust that may explode (USCG, 1999)

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Personal protection: P2 filter respirator for harmful particles. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Separated from strong oxidants. Salicylic acid should be stored in well-closed containers. Salicylic acid colloidion should be stored in tight containers at 15-30°C. Because the colloidion is flammable, it should not be stored near heat or an open flame. Salicylic acid plaster should be stored in well-closed containers, preferably at 15-30°C. The Trans-Ver-Sal plaster should be stored at a temperature less than 37.8°C.

8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2 Appropriate engineering controls

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

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face 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 protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state white to off-white crystalline powder

Colour White crystals, fine needles, or fluffy white crystalline powder

Odour SYNTHETIC ACID IS ODORLESS

Melting point/ freezing point 295°C (lit.)

Boiling point or initial boiling point and boiling range 211°C (lit.)

Flammability Combustible.

Lower and upper explosion Lower 1.1% @ 392 deg F (200°C)

limit / flammability limit	
Flash point	157\u00b0C
Auto-ignition temperature	1004 deg F (540\u00b0C)
Decomposition temperature	no data available
pH	pH of saturated solution: 2.4
Kinematic viscosity	no data available
Solubility	In water:1.8 g/L (20 \u00b0C)
Partition coefficient n-octanol/water (log value)	no data available
Vapour pressure	1 mm Hg (114 \u00b0C)
Density and/or relative density	1.44
Relative vapour density	4.8 (vs air)
Particle characteristics	no data available

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

GRADUALLY DISCOLORS IN SUNLIGHT

10.3 Possibility of hazardous reactions

SLIGHT WHEN EXPOSED TO HEAT OF FLAME; CAN REACT WITH OXIDIZING MATERIALS Dust explosion possible if in powder or granular form, mixed with air. SALICYLIC ACID is a carboxylic acid. Carboxylic acids donate hydrogen ions if a base is present to accept them. They react in this way with all bases, both organic (for example, the amines) and inorganic. Their reactions with bases, called "neutralizations", are accompanied by the evolution of substantial amounts of heat. Neutralization between an acid and a base produces water plus a salt. Carboxylic acids with six or fewer carbon atoms are freely or moderately soluble in water; those with more than six carbons are slightly soluble in water. Soluble carboxylic acid dissociate to an extent in water to yield hydrogen ions. The pH of solutions of carboxylic acids is therefore less than 7.0. Many insoluble carboxylic acids react rapidly with aqueous solutions containing a chemical base and dissolve as the neutralization generates a soluble salt. Carboxylic acids in aqueous solution and liquid or molten carboxylic acids can react with active metals to form gaseous hydrogen and a metal salt. Such reactions occur in principle for solid carboxylic acids as well, but are slow if the solid acid remains dry. Even "insoluble" carboxylic acids may absorb enough water from the air and dissolve sufficiently in it to corrode or dissolve iron, steel, and aluminum parts and containers. Carboxylic acids, like other acids, react with cyanide salts to generate gaseous hydrogen cyanide. The reaction is slower for dry, solid carboxylic acids. Insoluble carboxylic acids react with solutions of cyanides to cause the release of gaseous hydrogen cyanide. Flammable and/or toxic gases and heat are generated by the reaction of carboxylic acids with diazo compounds, dithiocarbamates, isocyanates, mercaptans, nitrides, and sulfides. Carboxylic acids, especially in aqueous solution, also react with sulfites, nitrites, thiosulfates (to give H₂S and SO₃), dithionites (SO₂), to generate flammable and/or toxic gases and heat. Their reaction with carbonates and bicarbonates generates a harmless gas (carbon dioxide) but still heat. Like other organic compounds, carboxylic acids can be oxidized by strong oxidizing agents and reduced by strong reducing agents. These reactions generate heat. A wide variety of products is possible. Like other acids, carboxylic acids may initiate polymerization reactions; like other acids, they often catalyze (increase the rate of) chemical reactions.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Incompatibility: Iron salts, spirit nitrous ether, lead acetate, iodine.

10.6 Hazardous decomposition products

When heated to decomp it emits acrid smoke and irritating fumes.

11. Toxicological information

Acute toxicity

Oral: LD₅₀ Mouse oral 480 mg/kg

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

12. Ecological information

12.1 Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (Water flea, <24 hr neonate); Conditions: freshwater, static, 21°C, pH 7.45; Concentration: 1060 mg/L for 24 hr; Effect: intoxication, immobilization /99.5% purity

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

12.2 Persistence and degradability

AEROBIC: Salicylic acid biodegraded rapidly under differing sets of agricultural practices in Pahokee muck soil(1). In October, soil planted to grass, fallow soil, and soil with sugar cane cover at 25°C, 43, 17 and 21%, respectively, of the radiolabeled salicylic acid was emitted as CO₂/cu cm of soil/min(1). In January, 26, 7 and 11%, respectively, of the starting material was emitted as CO₂/cu cm of soil/min(1).[(1) Tate RL III; Appl Environ Microbiol 37: 1085-90 (1979)] Full text: PMC243358

12.3 Bioaccumulative potential

An estimated BCF of 3 was calculated for salicylic acid(SRC), using a log K_{ow} of 2.26(1) and a regression-derived equation(2).

According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

12.4 Mobility in soil

The K_{oc} of salicylic acid is estimated as 404(SRC), using a log K_{ow} of 2.26(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated K_{oc} value suggests that salicylic acid is expected to have moderate mobility in soil. The pK_a of salicylic acid is 2.98(4), indicating that this compound will primarily exist in anion form in the environment and anions generally do not adsorb more strongly to soils containing organic carbon and clay than their neutral counterparts(5).

12.5 Other adverse effects

no data available

13. Disposal considerations

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.2 UN Proper Shipping Name

ADR/RID: unknown

IMDG: unknown

IATA: unknown

14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
salicylic acid	salicylic acid	69-72-7	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous Chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible

risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

