

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

Catalogue Number	CS-SS-24020
Product Name	Aspirin
CAS No.	50-78-2
Category	Secondary Standards
Synonyms	2-(Acetyloxy)benzoic acid (ACI); Rhodine (7CI); Salicylic acid acetate (8CI)
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email sales@clearsynth.com for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

- Skin irritation (Category 2)
- Serious eye damage/eye irritation (Category 2)
- Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning



Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H315	Causes skin irritation.

H319	Causes serious eye irritation.
H335	Not available
H334	Not available
H412	Not available
H360	Not available
H370	Not available
H372	Not available
H316	Not available
H371	Not available
H373	Not available

Precautionary Statement(s)

Code	Statement
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	Not available
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present.
P319	Get medical help if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Not available
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation
P233	Not available
P260	Not available
P273	Not available
P284	Not available
P342+P316	Not available
P403	Not available
P203	Not available
P308+P316	Not available
P318	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Aspirin

CAS Number : 50-78-2

Molecular Formula : C₉H₈O₄

Molecular Weight : 180.16

Parent Chemical : Aspirin

Synonyms : 2-(Acetyloxy)benzoic acid (ACI); Rhodine (7CI); Salicylic acid acetate (8CI)

Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures

General advice:

- Seek medical attention if symptoms persist or are severe.
- Show this safety data information to medical personnel.

Inhalation:

- Move person to fresh air.
- If breathing is difficult, seek medical attention.

Skin contact:

- Wash with soap and water.
- Remove contaminated clothing and wash before reuse.
- Seek medical attention if irritation develops.

Eye contact:

- Rinse cautiously with water for several minutes.
- Remove contact lenses if present and easy to do; continue rinsing.
- Seek medical attention if irritation persists.

Ingestion:

- Rinse mouth with water.
- Do not induce vomiting unless directed by medical personnel.
- Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Not available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

- Not available.

5.2 Special hazards arising from the substance or mixture

- Combustible solid; dust may form explosive mixture with air under certain conditions.
- Thermal decomposition may produce irritating and/or toxic fumes.
- Hazardous combustion products: Not available.

5.3 Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Use water spray to cool unopened containers.
- Avoid breathing smoke, fumes, or decomposition products.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid dust formation and breathing dust.
- Use appropriate personal protective equipment.
- Ensure adequate ventilation.

6.2 Environmental precautions

- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. Do not allow to enter drains.

6.3 Methods and material for containment and cleaning up

- Sweep up or vacuum up spillage and collect in suitable container for disposal.

- Avoid generating dust.
- Clean contaminated area with water and detergent as appropriate.

6.4 Reference to other sections

- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Avoid contact with skin and eyes.
- Avoid breathing dust.
- Use with adequate ventilation.
- Keep container tightly closed when not in use.
- Practice good industrial hygiene.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, well-ventilated place.
- Keep in original container, tightly closed.
- Protect from moisture.
- Incompatible materials: Not available.

7.3 Specific end use(s)

- Laboratory/analytical standard use. Not available for other uses.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

- Not available.

Biological limit values:

- Not available.

8.2 Exposure controls

Engineering controls:

- Use local exhaust ventilation or general ventilation to minimize dust exposure.

Personal protective equipment (PPE):

Eye/face protection:

- Safety glasses with side shields or chemical splash goggles.

Skin protection:

- Protective gloves.
- Lab coat or suitable protective clothing.

Respiratory protection:

- If dust is generated and ventilation is inadequate, use a suitable particulate respirator.

Hygiene measures:

- Wash hands after handling.
- Do not eat, drink, or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	White Crystalline Powder
IR spectrum	Confirms
pH	No data available
Solubility	In Water, Ethanol

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available

Property	Value
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

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10.1 Reactivity

- No data available.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- No data available.

10.4 Conditions to avoid

- Heat, ignition sources, and dust generation.
- Moisture (if applicable).

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products

- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: Aspirin is an acute irritant to the skin and eyes. Direct contact with the eye is painful. HUMAN EXPOSURE: The toxic effects of salicylate are complex. The following appear to be the principal primary effects of salicylate in overdose: Stimulation of the respiratory center; inhibition of citric acid cycle (carbohydrate metabolism); stimulation of lipid metabolism; inhibition of amino acid metabolism; and uncoupling of oxidative phosphorylation. Respiratory alkalosis, metabolic acidosis, water and electrolyte loss occur as the principal secondary consequences of salicylate intoxication. Central nervous system toxicity (including tinnitus, hearing-loss, convulsions and coma), hypoprothrombinemia and non-cardiogenic pulmonary edema may also occur, though for some the mechanism remains uncertain. Target organs: The target organs are: all tissues (whose cellular metabolism is affected), but in particular the liver, kidneys, lungs and the VIIIth cranial nerve.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: /PLANTS/ PHYTOTOXICITY: CHROMOSOMAL ABERRATIONS & ALTERATIONS IN ROOT CELLS OF BROAD BEAN PLANTS TREATED WITH ACETYSALICYLIC ACID (1.0 GRAIN).
- Carcinogenicity: /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ TWENTY-NINE 5-WK-OLD MALE F344/CRL RATS WERE FED A DIET CONTAINING 0 OR 0.5% ASPIRIN CONTINUOUSLY FOR 68 WEEKS. ALL SURVIVING RATS AT WEEK 68 WERE NECROPSIED; ORGANS IN THE THORACIC AND ABDOMINAL CAVITIES, AS WELL AS THE SKIN AND SUBCUTIS, WERE EXAMINED MACROSCOPICALLY. THE BLADDER, STOMACH, AND LIVER WERE PREPARED FOR HISTOPATHOLOGY. BODY WEIGHT GAIN WAS LOWER IN THE ASPIRIN-TREATED GROUP THAN IN THE CONTROL GROUP. NO BLADDER TUMORS

WERE REPORTED IN EITHER GROUP, EVEN THOUGH RENAL PAPILLARY NECROSES OF INTERSTITIAL TISSUE, CAPILLARIES, AND LOOPS OF HENLE WERE FOUND IN 13 OF 15 LESIONS EXAMINED IN THE TREATED GROUP. THERE WAS A SIGNIFICANT DECREASE IN THE SEVERITY OF NEPHROPATHY IN AGED RATS IN THE ASPIRIN-TREATED GROUP COMPARED WITH CONTROLS.

- Reproductive toxicity: /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Female /wistar rats/ were given 50 mg/kg/day of acetylsalicylic acid (ASA), by needle gavage once daily, during two different periods of pregnancy (day 1 to 4 of pregnancy; day 6 to 15 of pregnancy). The treatment of the dams with ASA did not cause embryotoxic or major malformations on experimental animal but was responsible for rate increased of fetuses presenting ureteric dilatation. After analysis of the data, it appears that, although direct conclusive evidence of adverse effects in humans is lacking, a potential hazard dose exists and thus the indiscriminate use of acetylsalicylic acid (aspirin) is contraindicated. /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Rat embryos were exposed to aspirin or its metabolite, salicylic acid in culture. In these embryos acute reduction of heart beat was observed during 4 hours of administration compared to that in non-treated one. Protein contents and crown-rump length of cultured embryos were significantly decreased in aspirin-treated group, but were not so decreased in salicylic acid-treated one. The predominant defects of the embryos exposed to aspirin were edematous facial malformations and abnormality of tail. On the other hand, facial anomalies such as cleft lip and curly tail were observed in the embryos cultured with salicylic acid. Anomalies induced by aspirin were systemic, while salicylic acid induced localized malformations.

- STOT-single exposure: HUMAN EXPOSURE: The toxic effects of salicylate are complex. The following appear to be the principal primary effects of salicylate in overdose: Stimulation of the respiratory center; inhibition of citric acid cycle (carbohydrate metabolism); stimulation of lipid metabolism; inhibition of amino acid metabolism; and uncoupling of oxidative phosphorylation. Respiratory alkalosis, metabolic acidosis, water and electrolyte loss occur as the principal secondary consequences of salicylate intoxication. Central nervous system toxicity (including tinnitus, hearing-loss, convulsions and coma), hypoprothrombinemia and non-cardiogenic pulmonary edema may also occur, though for some the mechanism remains uncertain. Target organs: The target organs are: all tissues (whose cellular metabolism is affected), but in particular the liver, kidneys, lungs and the VIIIth cranial nerve.

- STOT-repeated exposure: HUMAN EXPOSURE: The toxic effects of salicylate are complex. The following appear to be the principal primary effects of salicylate in overdose: Stimulation of the respiratory center; inhibition of citric acid cycle (carbohydrate metabolism); stimulation of lipid metabolism; inhibition of amino acid metabolism; and uncoupling of oxidative phosphorylation. Respiratory alkalosis, metabolic acidosis, water and electrolyte loss occur as the principal secondary consequences of salicylate intoxication. Central nervous system toxicity (including tinnitus, hearing-loss, convulsions and coma), hypoprothrombinemia and non-cardiogenic pulmonary edema may also occur, though for some the mechanism remains uncertain. Target organs: The target organs are: all tissues (whose cellular metabolism is affected), but in particular the liver, kidneys, lungs and the VIIIth cranial nerve. /SIGNS AND SYMPTOMS/ Mild chronic salicylate intoxication is called salicylism. When fully developed, the syndrome includes headache, dizziness, tinnitus, difficulty hearing, dimness of vision, mental confusion, lassitude, drowsiness, sweating, thirst, hyperventilation, nausea, vomiting, and occasionally diarrhea. /Salicylates/

- Aspiration hazard: No data available.

Likely routes of exposure

- Routes of entry: The route of entry is oral.

Symptoms related to the physical, chemical and toxicological characteristics

- Summary of clinical effects: Nausea, vomiting, epigastric discomfort, gastrointestinal bleeding (typically with chronic and rarely with acute intoxication); tachypnea and hyperpnea; tinnitus, deafness, sweating, vasodilatation, hyperpyrexia (rare), dehydration; irritability, tremor, blurring of vision, subconjunctival haemorrhages; hyper- or hypoglycemia; hypoprothrombinemia; increased serum aminotransferase activities (SGOT and SGPT);

non-cardiogenic pulmonary edema; confusion, delirium, stupor, asterixis, coma, cerebral edema (with severe intoxication only); acute renal failure; cardio-respiratory arrest (with severe intoxication only).

SECTION 12: Ecological information

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12.1 Toxicity

- No data available.

12.2 Persistence and degradability

- No data available.

12.3 Bioaccumulative potential

- No data available.

12.4 Mobility in soil

- No data available.

12.5 Results of PBT and vPvB assessment

- Not available.

12.6 Endocrine disrupting properties

- Not available.

12.7 Other adverse effects

- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/unused material:

- Dispose of in accordance with local/regional/national/international regulations.
- Do not discharge to drains.

Contaminated packaging:

- Dispose of as unused product or according to local regulations.

Waste code:

- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number

- Not available.

14.2 UN proper shipping name

- Not available.

14.3 Transport hazard class(es)

- Not available.

14.4 Packing group

- Not available.

14.5 Environmental hazards

- Not available.

14.6 Special precautions for user

- Not available.

14.7 Maritime transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

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

- Not available.

15.2 Chemical safety assessment

- No data available.

SECTION 16: Other information

SECTION 16: Other information

Product identifier:

- Product name: Aspirin
- CAS No.: 50-78-2
- Synonyms: 2-(Acetyloxy)benzoic acid (ACI); Rhodine (7CI); Salicylic acid acetate (8CI)
- Catalog No.: CS-SS-24020
- Category: Secondary Standards
- Molecular weight: 180.16

Supplier:

- Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:

- Not available.

Disclaimer:

- The information provided is believed to be accurate based on available data, but no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable regulations.

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