Material Safety Data Sheet

Date Printed: 24/MAY/2005
Date Updated: 13/MAR/2004
Version 1.5
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	SODIUM SALICYLATE, REAGENTPLUSTM, >=99%
Product Number	241350
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
SALICYLIC ACID SODIUM	54-21-7	200-198-0	None

Formula	C7H5NaO3
Molecular Weight	160.11 AMU
Synonyms	Alysine * Ardall * Aroall * Benzoic acid, 2-hydroxy-, monosodium salt (9CI) * Clin * Diuretin * Enterosalicyl * Enterosalil * 2-Hydroxybenzoic acid monosodium salt * o-Hydroxybenzoic sodium salt * Idocyl novum * Kerasalicyl * Kerosal * Magsalyl * Monosodium 2-hydroxybenzoate * Nadisal * Natrium salicylat (German) * Neo-salicyl * Parbocyl-rev * Salicylic acid, sodium salt * Salisod * Salsonin * Sodium o-hydroxybenzoate * Sodium salicylate * Sodium salicylic acid

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Harmful if swallowed.

4 - First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING
Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE
Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Light sensitive.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT
Respiratory Protection: Government approved respirator.
Hand Protection: Compatible chemical-resistant gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance	Physical State: Solid Color: Colorless Form: Fine crystals

Property	Value	At Temperature or Pressure
pH	6.5	
BP/BP Range	N/A	
MP/MP Range	300 °C	
Flash Point	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	N/A	
SG/Density	N/A	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY
Stable: Stable.
Conditions of Instability: May discolor on exposure to light.
Materials to Avoid: Strong oxidizing agents, Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: VO5075000

ACUTE TOXICITY

LDLO
Oral
Human
700 mg/kg
Remarks: Behavioral:Excitement. Behavioral:Muscle contraction or spasticity. Lungs, Thorax, or Respiration:Dyspnea.

LD50
Oral
Rat
930 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold.
Behavioral:Muscle contraction or spasticity.

LD50
Intraperitoneal
Rat
542 MG/KG

LD50
Oral
Mouse
540 mg/kg

LD50
Intraperitoneal
Mouse
500 MG/KG

LD50
Subcutaneous
Mouse
550 MG/KG

LD50
Intravenous
Mouse
560 MG/KG

LD50
Intramuscular
Mouse
760 MG/KG

LD50
Intravenous
Dog
562 MG/KG
Remarks: Behavioral:Analgesia.

LD50
Oral
Rabbit
1700 mg/kg

LD50
Intravenous
Rabbit
415 MG/KG

SIGNS AND SYMPTOMS OF EXPOSURE

Salicylic acid and other salicylates are transferred into breast milk. Animal and human data suggest that the reduced clearance of salicylates by neonates may result in drug accumulation and toxic effects even when repeated exposures are small. Because of these concerns, the WHO Working Group on Human Lactation classified the salicylates as unsafe for use by nursing women. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Harmful if swallowed.

CHRONIC EXPOSURE - MUTAGEN

Rat
600 MG/KG
Unreported
DNA damage

Rat
240 MG/L
Cell Type: liver
DNA damage

Rat
30 MG/L
Cell Type: Embryo
DNA damage

Mouse
200 MG/KG
Intraperitoneal
Cytogenetic analysis

Mouse
350 MG/KG
Oral
Cytogenetic analysis

CHRONIC EXPOSURE - TERATOGEN
Result: Laboratory experiments have shown teratogenic effects.

Species: Rat
Dose: 250 MG/KG
Route of Application: Oral
Exposure Time: (9D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rat
Dose: 3 GM/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord).

Species: Rat
Dose: 849 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (9-11D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Rat
Dose: 150 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (12-14D PREG)
Result: Effects on Embryo or Fetus: Fetal death.

Species: Rat
Dose: 300 MG/KG
Route of Application: Subcutaneous
Exposure Time: (9D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Central nervous system.

Species: Rat
Dose: 50 MG/KG
Route of Application: Subcutaneous
Exposure Time: (21D PREG)
Result: Specific Developmental Abnormalities: Cardiovascular (circulatory) system.

Species: Rat
Dose: 400 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Body wall.

Species: Rat
Dose: 400 MG/KG
Route of Application: Parenteral
Exposure Time: (10D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Species: Mouse
Dose: 665 MG/KG
Route of Application: Oral
Exposure Time: (17D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Effects on Embryo or Fetus: Other effects to embryo. Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Mouse
Dose: 2 GM/KG
Route of Application: Oral
Exposure Time: (8D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mouse
Dose: 1500 MG/KG
Route of Application: Oral
Exposure Time: (7D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mouse
Dose: 400 MG/KG
Route of Application: Intramuscular
Exposure Time: (9D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mouse
Dose: 500 MG/KG

Route of Application: Intramuscular
Exposure Time: (17D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Hamster
Dose: 1100 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (8D PREG)
Result: Specific Developmental Abnormalities: Central nervous system.

Species: Mammal
Dose: 250 MG/KG
Route of Application: Subcutaneous
Exposure Time: (18D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mammal
Dose: 400 MG/KG
Route of Application: Subcutaneous
Exposure Time: (13D PREG)
Result: Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD
Result: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Species: Rat
Dose: 40 MG/KG
Route of Application: Oral
Exposure Time: (20-21D PREG)
Result: Effects on Newborn: Stillbirth.

Species: Rat
Dose: 250 MG/KG
Route of Application: Oral
Exposure Time: (9D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Rat
Dose: 25 MG/KG
Route of Application: Oral
Exposure Time: (20-21D PREG)
Result: Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat
Dose: 375 MG/KG
Route of Application: Oral
Exposure Time: (8-10D PREG)
Result: Effects on Newborn: Behavioral.

Species: Rat
Dose: 180 MG/KG
Route of Application: Oral

Exposure Time: (9D PREG)
Result: Maternal Effects: Other effects. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rat
Dose: 500 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (8D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rat
Dose: 300 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Species: Rat
Dose: 600 MG/KG
Route of Application: Intravenous
Exposure Time: (6-13D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Rat
Dose: 400 MG/KG
Route of Application: Unreported
Exposure Time: (10D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Rat
Dose: 300 MG/KG
Route of Application: Unreported
Exposure Time: (9D PREG)
Result: Maternal Effects: Other effects.

Species: Mouse
Dose: 4 GM/KG
Route of Application: Oral
Exposure Time: (8-12D PREG)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Species: Mouse
Dose: 8 GM/KG
Route of Application: Oral
Exposure Time: (8-12D PREG)
Result: Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive).

Species: Mouse
Dose: 400 MG/KG
Route of Application: Intramuscular

Exposure Time: (12D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Specific Developmental Abnormalities: Cardiovascular (circulatory) system.

Species: Mouse
Dose: 500 MG/KG
Route of Application: Intramuscular
Exposure Time: (17D PREG)
Result: Maternal Effects: Parturition.

Species: Mammal
Dose: 125 MG/KG
Route of Application: Subcutaneous
Exposure Time: (18D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Mammal
Dose: 125 MG/KG
Route of Application: Subcutaneous
Exposure Time: (18D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

12 - Ecological Information

No data available.

ECOTOXICOLOGICAL EFFECTS
Test Type: LC50 Fish
Species: Pimephales promelas (Fathead minnow)
Time: 96 h
Value: 1,370 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR
Non-hazardous for road transport.

IMDG
Non-hazardous for sea transport.

IATA
Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: Xn

Harmful.
R-PHRASES: 22
Harmful if swallowed.

COUNTRY SPECIFIC INFORMATION

Germany
WGK: 1

SWITZERLAND
SWISS POISON CLASS: 3

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16 - Other Information

WARRANTY
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 Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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