SIGMA-ALDRICH

Material Safety Data Sheet
Date Printed: 04/25/2002
Date Updated: 10/21/1999
Version 1.0

Section 1 - Product and Company Information
Product Name: TANNIC ACID
Product Number: 216712
Brand: Aldrich Chemical
Company: Sigma-Aldrich
Street Address: 3650 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO, 63103, US
Technical Phone: 314 771 5786
Fax: 800 326 9652
Emergency Phone: 414 273 3850 Ext. 5966

Section 2 - Composition/Information on Ingredient
Substance Name: TANNIC ACID
CAS #: 1401-55-4
SARA 313: No
Formula: C76H53O46
Synonyms: Acid, tannic, Acide tannique (French), Gallotannic acid, Gallotannin, Glycetane, Tanin

Section 3 - Hazards Identification
Emergency Overview:
irritant,
irritating to eyes, respiratory system, and skin.
Target organ(s): Liver, Kidneys. Male reproductive system. Female reproductive system. Target organ(s): Liver, Kidneys. Readily absorbed through skin.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures
Immediate Treatment - Work Site:
In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Oral Exposure:
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure:
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Section 5 - Fire Fighting Measures
Autoignition Temp: 527 °C
Flammability: N/A
Suitable Extinguishing Media: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting Protective Equipment:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6 - Accidental Release Measures
Procedure 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. Wear disposable coveralls and discard them after use.

Methods for Cleaning Up:
Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage
Handling:
User Exposure:
Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage:
Suitable Storage:
Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE
Engineering Controls:
Safety shower and eyewash. Use only in a chemical fume hood.

Personal Protective Equipment:
Other:
Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

General Hygiene Measures:
Wash thoroughly after handling. Wash contaminated clothing and shoes.

Section 9 - Physical/Chemical Properties
Appearance:
Solid
Molecular Weight: 1,701.23 AMU

Property
Value
pH
N/A
BP/VP Range
N/A
MP/MF Range
218 °C
Freezing Point
N/A
Vapor Pressure
N/A
Vapor Density
N/A
Saturated Vapor Conc.
N/A
SG/Density
N/A
Bulk Density
N/A
Odor Threshold
N/A
Volatility%
N/A
VOG Content
N/A
Water Content
N/A
Solvent Content
N/A

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Section 10 - Stability and Reactivity

Stability
Materials to Avoid:
Strong oxidizing agents, Strong bases.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide.

Section 11 - Toxicological Information

Route of Exposure
Skin Absorption
Readily absorbed through skin.

Inhalation
Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes
May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

Target Organ(s) or System(s)
Liver. Kidneys. Male reproductive system. Female reproductive system.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Exposure can cause: Nausea, headache, and vomiting.

RTCS Number: WW5076000

Toxicity Data
Oral - Rat: 2,260 mg/kg (LD50)
Remarks: Behavioral: Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiratory: Dyspnea.
Gastrointestinal: Other changes.
Intraperitoneal - Mouse: 120 mg/kg (LD50)

Intramuscular - Mouse: 350 mg/kg (LD50)
Oral - Rabbit: 5,000 mg/kg (LD50)
Remarks: Gastrointestinal: Gastritis.
Lungs, Thorax, or Respiratory: Chronic pulmonary edema.

Chronic Exposure Carcinogen
Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Rat - Subcutaneous: 4450 mg/kg 17W

Mouse - Skin: 747 UG/KG 17D

Mouse - Subcutaneous: 750 MG/KG 12W
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

Rat - Subcutaneous: 3750 MG/KG 1

Rat - Subcutaneous: 2950 MG/KG 17W
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.

Rat - Subcutaneous: 2868 MG/KG 20W
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Other changes. Liver: Tumors.

IARC Carcinogen List
Rating
Group 3

Chronic Exposure - Mutagen
Species
Route
Mutation test
Oral
Unscheduled DNA synthesis

Chronic Exposure - Reproductive Hazard
Species
Route of Application
Exposure Time
Result: Effects on Newborn: Live birth index (# fetuses per litter, measured after birth). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Rat
112 GM/KG Oral (49D PREG)

Rat
50 GM/KG Subcutaneous (10 PREG)

Mouse
1478 GM/KG Oral (11W MALE/11W FEMALE)

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). Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Section 12 - Ecological Information

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
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.

Section 14 - Transport Information

DOT Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA Proper Shipping Name: None
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

US Classification and Label Text
Indication of Danger: Irritant.
Risk Statements
Irritating to eyes, respiratory system, and skin.

Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Do not breathe dust.

US Statements
Target organ(s): Liver, Kidneys. Male reproductive system. Female reproductive system. Target organ(s): Liver, Kidneys. Readily absorbed through skin.

United States Regulatory Information
SARA 313 Listed: No
TSCA Inventory Item: Yes

Section 16 - Other Information

Warranty