Material Safety Data Sheet
Tannic acid

Section 1 - Chemical Product and Company Identification

MSDS Name: Tannic acid
Catalog Numbers: 20242-0000, 20242-0010, 20242-0050, 20242-5000, 41999-0000, 41999-1000, 41999-5000
Synonyms:

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1401-55-4</td>
<td>Tannic acid</td>
<td>95%</td>
<td>215-753-2</td>
</tr>
</tbody>
</table>

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Not available

Potential Health Effects

Eye: May cause eye irritation. Lachrymator (substance which increases the flow of tears). May cause redness, pain, blurred vision and possible eye damage.

Skin: May cause skin irritation. May be absorbed through the skin in harmful amounts. Direct contact may produce erythema (redness) and pain.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage.
Inhalation: May cause respiratory tract irritation.

Chronic: Chronic ingestion may cause liver damage. Prolonged or repeated eye contact may cause conjunctivitis.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container.

Section 7 - Handling and Storage

Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 1401-55-4:
Personal Protective Equipment

Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: yellow - brown
Odor: faint odor
pH: 3.5 (100 g/L (20°C))
Vapor Pressure: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: 218 deg C (decom)
Autoignition Temperature: 527 deg C (980.60 deg F)
Flash Point: 198 deg C (388.40 deg F)
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature:
Solubility in water: 250 g/l (20°C)
Specific Gravity/Density:
Molecular Formula: C76H52O46
Molecular Weight: 1701.23

Section 10 - Stability and Reactivity

Chemical Stability: Air sensitive. Light sensitive.
Conditions to Avoid: Incompatible materials, light, exposure to air, temperatures
above 200°C, exposure to moist air or water.

Incompatibilities with Other Materials
Strong oxidizing agents, strong bases.

Hazardous Decomposition Products
Carbon monoxide, carbon dioxide.

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

RTECS#: WW5075000

CAS# 1401-55-4: FM3015000 PY7955000 UZ3400000 WU7185000 WW5075000

RTECS:

CAS# 1401-55-4: Oral, rabbit: LD50 = 5 gm/kg;

LD50/LC50:
Oral, rat: LD50 = 2260 mg/kg;
Other: Oral rat LD50 = 3000 mg/kg

Carcinogenicity:
Tannic acid - IARC: Group 3 (not classifiable)

Other:
The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity:
Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information


Shipping Name: Not regulated.
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: Not available
Risk Phrases:
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 1401-55-4: 1

Canada

CAS# 1401-55-4 is listed on Canada's DSL List

US Federal

TSCA

CAS# 1401-55-4 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 1/19/1996
Revision #1 Date 12/21/2004
Revisions were made in Sections: General revision.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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