

Printing date 03/19/2019

Reviewed on 07/09/2018

1 Identification

- · Product identifier
- · Trade name: <u>Tannic Acid</u>
- Article number: 190275
- · CAS Number:
- 1401-55-4
- · EC number:
- 215-753-2
- Molecular Formula C76 H52 O46
- Molecular Weight 1,701.21
- · Application of the substance / the mixture For Research Use Only

Details of the supplier of the safety data sheet Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

• Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements
- Causes serious eye irritation.
- · Precautionary statements
- Wash thoroughly after handling.
- Wear eye protection / face protection.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- · Classification system:
- · NFPA ratings (scale 0 4)



(Contd. on page 2)

⁻ US

Printing date 03/19/2019

Reviewed on 07/09/2018

(Contd. of page 1)

Trade name: Tannic Acid

· HMIS-ratings (scale 0 - 4)



• Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 1401-55-4 Tannins
- · Identification number(s)
- **EC number:** 215-753-2

4 First-aid measures

- · Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- 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.
- $\cdot \textit{Environmental precautions: } Do not allow to enter sewers/ \textit{surface or ground water.}$
- Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections
- See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

US

Printing date 03/19/2019

Reviewed on 07/09/2018

Trade name: Tannic Acid

(Contd. of page 2)

See Section 13 for disposal information. • Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

• PAC-3:

Substance is not listed.

7 Handling and storage

· Handling:

- · Precautions for safe handling
- Avoid direct contect with skin. Use protective clothing including gloves, lab coat, face/eye protection.
- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 15-30°C
- Requirements to be met by storerooms and receptacles: No special requirements.
- Further information about storage conditions:
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see Section 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.
- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

(Contd. on page 4)

US -

Printing date 03/19/2019

Reviewed on 07/09/2018

(Contd. of page 3)

Trade name: Tannic Acid

• **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

Information on basic physical and	chemical properties	
General Information		
Appearance:		
Form:	Powder	
Color:	Brown Indeterminate	
· Odor: · Odor threshold:	Indeterminate Not determined.	
· pH-value:	3.5	
• Change in condition		
Boiling point/Boiling range:	Undetermined.	
Flash point:	199 °C (390.2 °F)	
Flammability (solid, gaseous):	Product is not flammable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	See section 10	
Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
· Vapor pressure:	Not applicable.	
Density:	Not Applicable	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
• Evaporation rate	Not applicable.	
Solubility in / Miscibility with	Not Determined	
• Water at 20 °C (68 °F):	250 g/l	
Partition coefficient (n-octanol/wat	t er): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gl	
Solids content:	100.0 %	

Printing date 03/19/2019

Reviewed on 07/09/2018

(Contd. of page 4)

Trade name: Tannic Acid

• Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 2,260 mg/kg (rat)

1401-55-4 Tannins

Oral LD50 2,260 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

3

Printing date 03/19/2019

Reviewed on 07/09/2018

(Contd. of page 5)

Trade name: Tannic Acid

Danger to drinking water if even small quantities leak into the ground.

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Can not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation: Discard must be made according to official regulations.

• Recommended cleansing agent: Water, if necessary with cleaning agents.

Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated
· Transport hazard class(es)	
DOT, ADR, IMDG, IATA Class	Not regulated
Packing group DOT, ADR, IMDG, IATA	Not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
UN ''Model Regulation'':	Not regulated

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

(Contd. on page 7)

US

Printing date 03/19/2019

Reviewed on 07/09/2018

Trade name: Tannic Acid

· Proposition 65

(Contd. of page 6)

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

• *GHS label elements* The substance is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Warning

· Hazard statements

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Quality Control Dept.

- · Date of preparation / last revision 03/19/2019 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

(Contd. on page 8)

US

Printing date 03/19/2019

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Trade name: Tannic Acid

HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A (Contd. of page 7)

US –