

Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 24.05.2006 Supersedes edition of 13.09.2002

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No.: 100773

Product name: Tannic acid powder EMPROVE® Ph Eur, USP

Use of the substance/preparation

Pharmaceutical production and analysis

Company/undertaking identification

Company: Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0

Emergency telephone No.: Please contact the regional Merck representation

in your country.

2. Composition/information on ingredients

Natural product of varying composition.

Synonyms

Tannin

CAS-No.: 1401-55-4

EC-No.: 215-753-2

3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

4. First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing. After eye contact: rinse out with plenty of water with the eyelid held wide open.

After swallowing: make victim drink plenty of water. Consult doctor if feeling unwell.

5. Fire-fighting measures

Suitable extinguishing media:

Water, CO₂, foam, powder.

Special risks:

Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for fire fighting:

Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

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6. Accidental release measures

Person-related precautionary measures:

Avoid generation of dusts; do not inhale dusts.

Environmental-protection measures:

Do not allow to enter sewerage system.

Procedures for cleaning / absorption:

Take up dry. Forward for disposal. Clean up affected area.

7. Handling and storage

Handling:

Store protected from solvents.

Storage:

Tightly closed. Dry. Storage temperature: no restrictions.

Exposure controls/personal protection

Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

required when dusts are generated. Filter P 1 (acc. to DIN 3181) for Respiratory protection:

solid particles of inert substances.

Eye protection: required

Hand protection: In full contact:

> nitrile rubber Glove material: Layer thickness: 0.11 mm Breakthrough time: > 480 Min.

In splash contact:

Glove material: nitrile rubber Layer thickness: 0.11 mm > 480 Min. Breakthrough time:

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 741 Dermatril® L (full contact), 741 Dermatril® L (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended

glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Industrial hygiene:

Change contaminated clothing. Wash hands after working with substance.

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9. Physical and chemical properties

Form: solid

Colour: brownish to yellow

Odour: odourless

pH value

at $100 \text{ g/l H}_2\text{O}$ (20 °C) ~ 3.5

Melting point not available
Boiling point not available
Ignition temperature not available
Flash point not available
Explosion limits lower not available
upper not available

not available

Bulk density $\sim 220 \text{ kg/m}^3$

Solubility in

Density

water $(20\,^{\circ}\text{C})$ 250 g/l Thermal decomposition > 210 $^{\circ}\text{C}$

log Pow -0.19 (calculated) (Lit.)

10. Stability and reactivity

Conditions to be avoided

Strong heating.

Substances to be avoided

no information available

Hazardous decomposition products

no information available

11. Toxicological information

Acute toxicity

Appropriate quantitative data on the toxicity of this product are not available.

Further toxicological information

After swallowing of large amounts: gastrointestinal complaints (Nausea, vomiting).

Further data

Therapeutically used substance. Naturally occurring substance.

The product should be handled with the care usual when dealing with chemicals.

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12. Ecological information

Behavior in environmental compartments: Distribution: log Pow: -0.19 (calculated) (Lit.). No bioaccumulation is to be expected (log Pow <1).

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Product:

Chemicals must be disposed of in compliance with the respective national regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.

Packaging:

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under www.retrologistik.de you will find special information on the respective national conditions as well as contact partners.

14. Transport information

Not subject to transport regulations.

15. Regulatory information

Labelling according to EC Directives

Symbol: --R-phrases: --S-phrases: ---

16. Other information

Reason for alteration

Chapter 1:change in product name.

General update.

Regional representation:

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.