

# MATERIAL SAFETY DATA SHEET OF HESPERIDIN

## 1 PRODUCT

Name: Hesperidin

Synonym: Hesperitin 7-O-rutinoside, Hesperetin-7-rhamnoglucoside, Ciratin, Cirmtin

## 2 STUCTURAL FORMULA

Molecular Formula:  $C_{28}H_{34}O_{15}$

Formla Weight: 610.58

## 3 CAUTION

Be used as a kind of Vitamin. Be used to cure the hemorrhage caused by brittleness of blood capillary and assist to cure hypertension.

In normal case should not cause acute or chronic symptom, or cancer. Avoid misuse.

Keep away from Children.

## 4 FIRST AID MEASURES

Contact with skin: Non-poison, suggest to clean and rinse with soapsuds.

Contact with eyes: Clean and rinse with enough water at once. If irritant headache, consult to a doctor.

Swallow: If swallow of large quantity, see a doctor immediately and treat it under a doctor's advise.

## 5 FIRE PREVENTION AND FIGHTING

This product can burn in fire.

The most effective method: apply foam generated by water and carbon dioxide dry powder.

Fire fighting notice: Firemen should wear the equipment helping respiration and approach to the fireplace with cautions. Furthermore, they should know in advance how to remove the container from site and spray with water to lower temperature.

## 6 Accidental Release Measures

## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, 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 STORAGE

Conditions: Protect from light and keep in well-closed container, at a dry and well-ventilated place with temperature less than 25°C.

Indications: Don't be close to dust and fire sources

Ensure transmission equipment earthed safely.

Use under well-ventilated condition; Avoid absorption and touching with skin, eyes.

Provide dryproof device for grinding, mixing and drying procedures.

Seal the package after use.

## 8 PROTECTION

Personal Protection: Keep well-ventilated condition.

Wear gauze mask in the place with dense dust, with dust-proof function.

Wear gloves made up of plastics or rubber.

Wear protective work clothes.

Wear safety glasses (dust-proof glasses are preferred)

Other Protection: Disinfect regularly in order to avoid dust accumulation.

## 8 PHYSICAL AND CHEMICAL PROPERTIES

Character: light yellow or yellow crystalline powder, odorless, tastelessness.

Solubility: easy solute in hot methanol, alcohol; solute in alcohol, glycerine, pyridine; not solute in benzene, ether.

Melting point: 185°C (decomposition).

## 10 STABILITY

Be stable in air.

- 1) Substances which should be avoid to contact: alkali, oxidant, metal.
- 2) Decomposition temp: 185°C.

## 11 NOTICE ON ENVIRONMENT

Ensure transportation, storage and usage in accordance with relative regulations; Avoid unfavorable effects on environment.

## 12 Toxicological Information

### SIGNS AND SYMPTOMS OF EXPOSURE

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.

Eye Contact: May cause eye irritation.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

## 13 Ecological Information

No data available.

## 14 Disposal Considerations

### SUBSTANCE DISPOSAL

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.

## 15 TRANSPORTATION

Avoid heating, crash and exposure to sunshine and rain.

Maintain its package undamaged.

Don't mix with harmful or poisonous substances, or other pollutants.

## 16 OTHERS

The related laws and regulations should be strictly applied when this product be used in medicines, foods and feed.

The information contained here is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them, and must make independent determinations of suitability and completeness of information from all source, to assure proper use and disposal of these materials, and the safety and health of employees and customers, and the protection of the environment.

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