

Safety Data Sheet

SAFETY DATA SHEET - LC LABORATORIES REVISION DATE: JULY 1, 2019

SECTION 1. IDENTIFICATION:

Trade name: Genistein
Product Number: [G-6055](#)
Manufacturer/Supplier:
LC Laboratories
165 New Boston Street
Woburn, MA 01801 USA
+1-781-937-0777 Fax: +1-781-938-5420

SECTION 2. HAZARD(S) IDENTIFICATION:

Hazard Description:
Substance Class Identifier: Tumorigen; Drug; Hormone; Mutagen; Natural Product; Human Data; Reproductive Effector
May be harmful if swallowed, inhaled, or absorbed through the skin
In at least one study ingestion resulted in gastrointestinal toxicities and impaired immunity
Exposure may cause irritation of the skin, eyes, mucous membranes, and upper respiratory tract
Signal Word: Warning
GHS Hazard Statements:
H302+312+332 - Harmful if swallowed, in contact with skin or if inhaled
GHS Precautionary Statements:
P2562 - Do not get in eyes, on skin or on clothing
WARNING: For Laboratory Research Use Only



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name: 5,7-Dihydroxy-3-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: 4',5,7-Trihydroxyisoflavone, Baichanin A, Bonistein, Genisteol, Genisterin, GeniVida, Prunetol, Sophoricol
Hazardous Ingredient: Genistein
CAS Registry Number: 446-72-0
Molecular Weight: 270.24
Molecular Formula: C₁₅H₁₀O₅

SECTION 4. FIRST-AID MEASURES:

After Inhalation: If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration

After skin contact: flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

After eye contact: flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing: if swallowed, wash out mouth with copious amounts of water; call a physician

SECTION 5. FIRE-FIGHTING MEASURES:

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam

Protective equipment: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

Unusual fire hazard: may emit toxic fumes under fire conditions

SECTION 6. ACCIDENTAL RELEASE MEASURES:

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves

Measures for cleaning/collecting: absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13

SECTION 7. HANDLING AND STORAGE:

Information for safe handling: avoid contact with skin, eyes and clothing; material may be an irritant

Storage: store solid and solutions at -20 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator

Protection of hands: handle with Nitrile rubber gloves with minimum thickness of 0.11 mm (4.3 mil). This recommendation should not be interpreted as offering an approval for any specific use conditions. Please review this recommendation with a safety officer to evaluate if it is appropriate for the anticipated use.

Eye protection: chemical safety goggles

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:

Form: crystalline solid; granular or powder

Color: off-white to beige or light tan

Odor: none

Melting point/Melting range: 295-305 °C

Danger of explosion: none
Solubility in / Miscibility with water: not soluble
Solvent content: none
Organic solvents: soluble in DMSO

SECTION 10. STABILITY AND REACTIVITY:

Stability: avoid acids and bases
Thermal decomposition / conditions to be avoided: protect from light and heat
Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide and carbon dioxide

SECTION 11. TOXICOLOGICAL INFORMATION:

RTECS #: NR2392000
Acute toxicity: intraperitoneal toxicity (LD50): >500 mg/kg (mouse); oral toxicity (TDLo): 0.3 mg/kg (mouse); intravenous toxicity (TDLo): 10 mg/kg (mouse), 100 µg/kg (rabbit); subcutaneous toxicity (TDLo): 10.8 g/kg (mouse)
Primary irritant effect:
On the skin: may be an irritant; may be harmful if absorbed through the skin
On the eye: may be an irritant
Inhalation: may cause respiratory tract irritation; may be harmful if inhaled
Ingestion: may be harmful if swallowed

SECTION 12. ECOLOGICAL INFORMATION:

General notes: no data available
Treat as potentially toxic if released into the environment

SECTION 13. DISPOSAL CONSIDERATIONS:

Dispose of in accordance with prevailing country, federal, state and local 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 class:
Proper shipping name: none
Non-Hazardous for transport: this substance is considered to be non-hazardous for transport

SECTION 15. REGULATORY INFORMATION:

Code letter and hazard designation of product:

EU Risk And Safety phrases:

S22: Do not breathe dust

S24/25: Avoid contact with skin and eyes

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection

S45: In case of accident or if you feel unwell seek medical advice immediately
(show the label where possible)

R62: Possible risk of impaired fertility

R63: Possible risk of harm to the unborn child

R68: Possible risk of irreversible effects

SECTION 16. OTHER INFORMATION:

The above information is believed to be correct based on our present knowledge but does not purport to be complete. For research use only by trained personnel. The burden of safe use of this material rests entirely with the user. LC Laboratories disclaims all liability

Reviewed: July 1, 2019