1. Chemical Product and company Identification

Product Name: 木犀草素

English Name: Luteolin

Catalogue No: 491-70-3
Supplier: Chengdu Biopurify Phytochemicals Ltd.
Address: No. 11 Building, No. 388 Rongtaidadao CNSTP, Wenjiang Zone, Chengdu Sichuan 611130 China
Tel: +86-28-82633987  Fax: +86-28-82633165
Website: www.phytopurify.com
Email: service@phytopurify.com

2. Composition, Information on Ingredients

Alias: Digitoflavone; Daphneflavonol; Flavopurpol; Luteolol
CAS Number: 491-70-3
Mol. Formula: C15H10O6
Mol. Weight: 286.239
Identified uses: Laboratory chemicals, for R&D
Storage: Room temperature for transportation, for long term storage, protected from strong light, keep package airproofed when not in use.

3. Hazards identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
- Skin irritation (Category 2), H315
- Eye irritation (Category 2), H319
- Specific target organ toxicity - single exposure (Category 3), H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC
- Xi Irritant  R36/37/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

Label elements

Labelling according Regulation (EC) No 1272/2008
Pictogram
Signal word   Warning
Hazard statement(s)
H315   Causes skin irritation.
H319   Causes serious eye irritation.
H335   May cause respiratory irritation.
Precautionary statement(s)
P261   Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338   IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard none
Statements
Safety data sheet available on request.
Other hazards - none

4. First-aid measures

If inhaled
- If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.
In case of skin contact
- Wash off with soap and plenty of water. Consult a doctor.
In case of eye contact
Flush eyes with water as a precaution. Consult a doctor.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a doctor.
Indication of any immediate medical attention and special treatment needed
No data available
Show this safety data sheet to the doctor in attendance.
Immediate medical attention is required.

5. Fire-fighting measures
Conditions of flammability
Not flammable or combustible.
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. Accidental release measures
Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage
Handling:
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Keep away from sources of ignition. Avoid prolonged or repeated exposure.
Storage:
Store in a well closed container. Protected from air and light, put into refrigerator or freeze for long term storage.
Specific end uses
Use in a laboratory fume hood where possible. Refer to employer is COSHH risk assessment.

8. Exposure controls, personal protection
Contains no substances with occupational exposure limit values.
Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and body protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
9. Physical and chemical properties

Physical Description: Yellow powder

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
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</tr>
<tr>
<td>Melting point/freezing point</td>
<td>330°C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>616.1°C at 760 mmHg</td>
</tr>
<tr>
<td>Flash point</td>
<td>239.5°C</td>
</tr>
<tr>
<td>Density</td>
<td>1.654 g/cm³</td>
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<tr>
<td>Evaporation rate</td>
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<tr>
<td>Upper flammability limits</td>
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<tr>
<td>Lower flammability limit</td>
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<td>Vapor pressure</td>
<td>9.03E-16 mmHg at 25°C</td>
</tr>
<tr>
<td>Vapor density</td>
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<tr>
<td>Specific gravity</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Solubility in other solvents</td>
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<tr>
<td>Partition coefficient</td>
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<tr>
<td>Autoignition temperature</td>
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<tr>
<td>Kinematic viscosity</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</td>
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</tr>
</tbody>
</table>

10. Stability and reactivity

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. Toxicological information

Acute toxicity
Oral LD50: no data available
Inhalation LC50: no data available
Dermal LD50: no data available
Other information on acute toxicity: no data available

no data available
Serious eye damage/eye irritation
no data available
Respiratory or skin sensitisation
no data available
Germ cell mutagenicity
no data available
Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes May be caused eye irritation.
Synergistic effects
no data available
Additional Information
RTECS: Not available

12. Ecological information
Toxicity
no data available
Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
no data available

13. Disposal considerations
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

14. Transport information
Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID and IATA.
UN number
Does not meet the criteria for classification as hazardous for transport.
UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
Transport hazard class(es)
Does not meet the criteria for classification as hazardous for transport.
Packaging group
Does not meet the criteria for classification as hazardous for transport.
Environmental hazards
This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.
Special precautions for user
no data available

15. Regulatory information
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture
For this product a chemical safety assessment was not carried out

16. Other information

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Biopurify and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.phytopurify.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.