

20/06/2016

**MATERIAL SAFETY DATA SHEET**

Edition	Revision date	Creation date
10.00.00	01/06/2016	01/06/2016

**1 . IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY****Product name** : Luteolin**Catalogue number** : 1125 S**CAS NUMBER** : [491-70-3]**EC Number** : 207-741-0**Index number** : -**Relevant identified uses of the substance / mixture and uses advised against**

Reagent for research use only

**Supplier** :

EXTRASYNTHÈSE  
Z.I Lyon Nord  
Impasse Jacquard - C.S 30062  
69727 GENAY CEDEX - FRANCE  
Phone. (33)(0)478-98-20-34  
Fax. (33)(0)478-98-19-45  
info@extrasynthese.com  
Emergency call number ORFILA (France) : Tel : (33)(0)145-42-59-59

**2 . HAZARDS IDENTIFICATION****Classification of the substance / mixture**According to Regulation (EC) No1272/2008

Skin Irritation (Category 2) ; H315

Eye Irritation (Category 2) ; H319

Specific Target Organ Toxicity - Single Exposure (Category 3) ; H335

**Label elements**

Warning



SGH07

Hazard statements

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

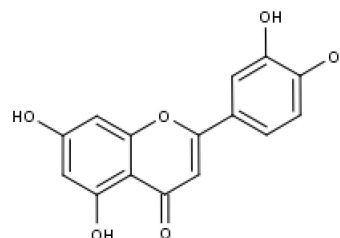
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Supplemental hazard information

None

**Other hazards**

None

**3 . COMPOSITION / INFORMATION ON INGREDIENTS****Product name** : Luteolin**Empirical formula** : C<sub>15</sub>H<sub>10</sub>O<sub>6</sub>**CAS NUMBER** : [491-70-3]**Synonyms** : 3',4',5,7-Tetrahydroxyflavone**EC Number** : 207-741-0**Other hazardous ingredients**

<b>Tetrahydrofuran</b>		
CAS NUMBER	Concentration	Classification
[109-99-9]	<3%	Eye Irrit. 2 (H319) ; Flam. Liq. 2 (H225) ; STOT SE 3 (H335)
<b>Toluene</b>		
CAS NUMBER	Concentration	Classification
[108-88-3]	<3%	Asp. Tox. 1 (H304) ; Flam. Liq. 2 (H225) ; Repr. 2 (H361d) ; STOT RE 2 (H373) ; STOT SE 3 (H336) ; Skin Irrit. 2 (H315)

For the full text of the H-statements and the R-phrases mentioned in this section, see section 16.

**4 . FIRST AID MEASURES****Inhalation**

In case of inhalation, move the victim to fresh air. If breathing is difficult, put the victim on oxygen. If breathing stops, carry out artificial respiration.

**In case of skin contact**

Wash thoroughly with water and soap.

**In case of eye contact**

Rinse well with plenty of water for at least 15 minutes.

**Ingestion**

Do not make an unconscious person vomit or swallow anything. Rinse the mouth thoroughly with water.

**5 . FIRE-FIGHTING MEASURES****Extinguishing media**

Carbon dioxide, dry powder.

**Special hazards arising from the substance**

Harmful/toxic vapours, carbon oxides may be released during the fire.

**Advise for fire-fighters**

Wear an autonomous breathing apparatus and suitable protection clothing against chemical agents.

**6 . ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment. Evacuate the personnel from the contaminated zone. Ensure adequate ventilation.

**Environmental precautions**

Keeping away from drains, surface and ground waters.

**Methods and materials for containment and cleaning up**

Clean up without creating dust and place in adapted and sealed containers for elimination. Wash the contaminated area with water and soap. Confine washing water and dispose of it complying with the local regulations. After cleaning, quickly eliminate traces of water with a product absorbing liquids (for example : sand, sawdust, universal binder, Kieselguhr).

**7 . HANDLING AND STORAGE****Precautions for safe handling**

Avoid formation of dust. Avoid contact with skin and eyes. During handling, wear suitable personal protective equipment (see section 8). Follow the normal measures for preventive fire protection.

**Specific handling**

No data available.

**Specific end use(s)**

No data available

**Conditions for safe storage, including any incompatibilities**

Store in a cool well-ventilated place.

Keep container tightly closed in a dry place away from light.

Store at <+8°C

**8 . EXPOSURE CONTROL/PERSONAL PROTECTION****Respiratory protection**

Wear imperatively an appropriated mask/respirator, tested and approved by standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with protective gloves. The selected gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Eye protection**

Wear safety glasses.

**Skin protection**

Wear suitable protective clothing according to the quantity and the level of activity of the substance at the workplace.

**9 . PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Physical state	: Powder
Color	: Yellow
Solubility in	: Ethyl alcohol (Soluble)
Melting point	: No data available.
Initial boiling point	: No data available.
Flash point	: No data available.
pH	: No data available.

Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: No data available.

**Other information**

No data available

**10 . STABILITY AND REACTIVITY****Reactivity**

No data available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No hazardous reactions during storage and handling complying with the instructions.

**Conditions to avoid**

No data available.

**Incompatible materials**

No data available.

**Hazardous decomposition products**

No hazardous decomposition products if the instructions for handling and storage are respected. During high overheating of the substance or during a fire, hazardous decomposition products may be produced.

**11 . TOXICOLOGICAL INFORMATION****Acute oral toxicity**

No data available.

**Acute dermal toxicity**

No data available.

**Acute inhalation toxicity**

No data available.

**Skin Corrosion**

No data available.

**Skin Irritation**

No data available.

**Serious Eye Damage**

No data available.

**Eye Irritation**

No data available.

**Respiratory Sensitisation**

No data available.

**Skin Sensitisation**

No data available.

**Germ Cell Mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration Hazard**

No data 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.

**Results of PBT and vPvB assessment**

No data available.

**Other adverse effects**

No data available.

**13 . DISPOSAL CONSIDERATIONS****Waste treatment methods**

Non-recyclable surplus and solutions must be sent to a licensed professional waste disposal service, while respecting the local statutory instructions. Contaminated packaging is to be eliminated in the same way as the product that is contained.

**14 . TRANSPORT INFORMATION**

Not dangerous goods

**Environmental hazards**

No

**15 . REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance**

Directive 96/82/CE (SEVESO category/named substances) : not applicable.

Regulation CE 2037/2000 (substances that deplete the ozone layer) : not applicable.

Regulation 850/2004 (persistent organic pollutants) : not applicable.

Regulation REACH-Titre VII (authorisations) et Titre VIII (restrictions) : not applicable.

**Chemical safety assessment**

Not applicable.

**16 . OTHER INFORMATION**

Full text of R-phrase(s) and S-phrase(s) according to European Directive 67/548/EEC-Full text of hazard statement(s) mentioned in section 3

<b>Asp. Tox.</b>	Aspiration Hazard
<b>Eye Irrit.</b>	Eye Irritation
<b>Flam. Liq.</b>	Flammable Liquids
<b>Repr.</b>	Reproductive Toxicity
<b>STOT RE</b>	Specific Target Organ Toxicity - Repeated Exposure
<b>STOT SE</b>	Specific Target Organ Toxicity - Single Exposure
<b>Skin Irrit.</b>	Skin Irritation
<b>1</b>	Category 1
<b>2</b>	Category 2
<b>3</b>	Category 3
<b>H225</b>	Highly flammable liquid and vapour
<b>H304</b>	May be fatal if swallowed and enters airways
<b>H315</b>	Causes skin irritation
<b>H319</b>	Causes serious eye irritation
<b>H335</b>	May cause respiratory irritation
<b>H336</b>	May cause drowsiness or dizziness
<b>H361d</b>	Suspected damage the unborn child
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure

**Use**

The information contained in this safety data sheet are based on our experience and our current knowledge. The data may in no case be considered as product specifications. It is provided for information purposes only with no obligation on our part. In this respect, we shall not be held liable for the use which is made of our products and for the information given above.

**Abbreviations and acronyms**

ADR: Agreement on Dangerous Goods by Road  
RID: Regulations concerning the International Transport of Dangerous Goods by Rail  
IATA: International Air Transport Association  
CAS: Chemical Abstract Service  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: Very Persistent and Very Bioaccumulative