

# Safety Data Sheet

#### Section 1. Product and Company Identification

Product Name Luteolin Product ID L8377

**Chemical Name** (Synonyms)

3',4',5,7-Tetrahydroxyflavone; Digitoflavone; Cyanidenon

Supplier

LKT Laboratories, Inc 545 Phalen Blvd.

St. Paul, MN 55130 USA

Ph: 651-644-8424 Fax: 651-644-8357 www.lktlabs.com - getinfo@lktlabs.com

**Emergency Phone #** 

1-800-424-9300

#### Section 2. Hazards Identification

**GHS Classification** 

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

#### GHS Label elements including precautionary statements

#### **Pictogram**



Warning

#### Signal word

### Hazard and precautionary statements

# Hazard statements

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

#### Precautionary statements

P261 - Avoid breathing dust, fumes, gas, mist, vapors and spray.

P264 - Wash skin thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, eye protection and face protection.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor/ physician if you feel unwell.

P321 - Specific treatment (see supplemental first aid instructions on this label). P332 + P313 - If skin irritation occurs: Get medical advice/ attention.

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

P362 - Take off contaminated clothing and wash before reuse.

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

#### **HMIS Classification** Health hazard: 2

Chronic health hazard: \* Flammability: 0 Physical hazard: 0

## **NFPA Rating**

Health hazard: 2 Fire hazard: 0 Reactivity hazard: 0

#### **Potential Health Effects**

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes serious eye irritation.

Section 3. Com	position/Information	n on Ingredients

**Substances** 

286.24 **Formula** Formula Wt.  $C_{15}H_{10}O_{6}$ 491-70-3 207-741-0 EC No. CAS No.

#### Section 4. First Aid Measues

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact** 

Flush eyes with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact** 

Wash off with soap and plenty of water. Consult a physician.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### Section 5 . Firefighting Measures

**Flash Point** 

Not available.

Not available.

**Extingushing Media** 

Use water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide.

**Firefighting Procedures** 

Wear self-contained breathing apparatus and protective clothing for firefighting if necessary.

**Unusual Fire Hazards** 

### Section 6. Accidental Release Measures

**Personal Precautions** 

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, dust, mist or gas. Ensure

adequate ventilation. Evacuate personnel to safe areas.

**Environmental Precautions** 

Do not let product enter drains.

Methods and materials for containment and cleanup

Avoid raising dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### Section 7. Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide adequate exhaust ventilation at places where dust is formed. area. Use only in a chemical fume hood. Wash thoroughly after handling material.

**Storage Conditions** 

Store in a dry and well-ventilated place in a tightly closed container. Recommended store temperature is +4°C.

**Hazardous Decomposition Products** 

Carbon monoxide and carbon dioxide.

None.

Other Remarks

#### **Section 8. Exposure Controls/Personal Protection**

### Personal protective EXPOSURE CONTROLS

equipment Contains no substances with occupational exposure limit values.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

PERSONAL PROTECTION

Eye/face protection: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection Eye/face protection: Safety glasses with side-shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin 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. Full and splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

Body protection: Impervious clothing. Protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: For nuisance exposures, use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection, use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US)

respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Section 9. Physical and Chemical Properties

Solid Yellow crystalline powder. **Physical State** Color Not available. Not available. **Boiling Point** Volatility 330°C (lit.) Not available. **Melting Point Density** Soluble in methanol and alkaline solutions. Not available. Slightly soluble in water. DMSO to 57 mg/mL, Ethanol to 6mg/mL. **Solubility** pН Not available. Not available. Ignition Flash Point temperature Not available Not available. **Autoignition** Lower explosion limit temperature Not available. Not available. Vapor Upper explosion limit pressure Slightly soluble in water. Not available. Water solubility Odor Partition coefficient: Not available. Not available. Odor n-octanol/water Threshold Relative vapor density Not available. Not available. **Evaporation** rate

#### Section 10. Stability and Reactivity

Stable under recommended storage conditions. Stability

Keep away from strong oxidizing agents. **Materials To Avoid** 

Hazardous Carbon monoxide and carbon dioxide. Decomposition **Products** 

Possibility of Not available. hazardous reactions

single exposure (GHS)

Conditions to avoid

Not available.

#### Section 11. Toxicological Information

Oral LD50 Not available. Skin Not available.

corrosion/irritation

Inhalation LC50 Not available. Serious eye Not available.

damage/irritation

Dermal LD50 Not available. Respiratory or Not available.

skin sensitization

Other information on Not available.

Germ cell mutagenicity Human

acute toxicity lymphocyte Micronucleus t

Micronucleus test Sister chromatid exchange

Reproductive Toxicity Reproductive toxicity - rat - Oral Aspiration Hazard Not available.

Reproductive Toxicity

Reproductive toxicity - rat - Oral
Effects on Fertility: Pre-implantation mortality (e.g.,
reduction in number of implants per female; total
number of implants per corpora lutea).

Specific organ toxicity Inhalation - May cause respiratory irritation.

Synergistic effects Not available.

Specific organ toxicity Not available.

Additional Information RTECS: LK9275210

repeated exposure (GHS)

To the best of our knowledge, the chemical, physical and toxicological properties have not

physical and toxicological properties have not been thoroughly investigated.

been introdginy investigated.

Teratogenicity Not available.

Signs and symptoms Stomach - irregularities - Based on human of exposure evidence.

Potential Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Health Effects Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes serious eye irritation.
Ingestion: May be harmful if swallowed.

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.

#### Section 12. Ecological Information

Toxicity Not available. Mobility in soil Not available.

Bioaccumulative potential Not available.

#### **Section 13. Disposal Considerations**

Dispose of material according to all federal, state and local regulations.

Waste Disposal Offer material to a licensed professional disposal company to dispose of as unused product.

#### **Section 14. Transport Information**

**DOT (US)** Not dangerous goods.

IATA Not dangerous goods.

IMDG Not dangerous goods.

**Further Information** 

#### **Section 15. Regulatory Information**

Reach No.

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components Acute health hazard and chronic health hazard.

Massachusetts Right No components are subject to the Massachusetts Right to Know Act. To Know Components

Pennsylvania Right Luteolin CAS #: 491-70-3 Revision Date: To Know Components

New Jersey Right Luteolin CAS #: 491-70-3 Revision Date: To Know Components

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

#### **Section 16. Other Information**

Other information

The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

**Updated** 6/11/2020

For emergencies in the USA, call CHEMTREC 800-424-9300