



Section 1. Product and Company Identification

Product Name Silybin
Product ID S3343
Chemical Name (Synonyms) Silibinin; Silybum substance E₆; Silymarin I
Supplier LKT Laboratories, Inc
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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****Signal word** Warning**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 and/or attention.
P337 + P313 - If eye irritations persists: Get medical advice and/or 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.

Ingestion: May be harmful if swallowed.

Section 3. Composition/Information on Ingredients

Substances

Formula $C_{25}H_{22}O_{10}$
CAS No. 22888-70-6

Formula Wt. 482.44
EC No. 245-302-5

Section 4. First Aid Measures

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 seek medical attention immediately.

Skin Contact Wash with soap and water for 15 minutes and 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.

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

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

Unusual Fire Hazards Carbon oxides.

Section 6. Accidental Release Measures

Personal Precautions Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, dust 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 Do not create 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 appropriate exhaust ventilation at places where dust is formed.

Storage Conditions Store in a cool, dry and well-ventilated place in a tightly closed container. Recommended storage temperature: -20°C.

Hazardous Decomposition Products Not available.

Other Remarks None.

Section 8. Exposure Controls/Personal Protection

Personal protective equipment EXPOSURE CONTROLS

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 tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Safety glasses with side-shields conforming to EN166. 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: You should wear impervious clothing. The type of 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) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State	Solid.	Color	Yellowish powder.
Boiling Point	Not available.	Volatility	Not available.
Melting Point	167°C or 180°C(dec.)	Density	Not available.
Solubility	Soluble in acetone, ethyl acetate, methanol or ethanol. Practically insoluble in water.	pH	Not available.
Flash Point	Not available.	Ignition temperature	Not available.
Lower explosion limit	Not available.	Autoignition temperature	Not available.
Upper explosion limit	Not available.	Vapor pressure	Not available.
Water solubility	Practically insoluble in water.	Odor	Not available.
Partition coefficient: n-octanol/water	Not available.	Odor Threshold	Not available.
Relative vapor density	Not available.	Evaporation rate	Not available.

Section 10. Stability and Reactivity

Stability	Stable under recommended storage conditions.
Materials To Avoid	Keep away from heat and strong oxidizing agents.
Hazardous Decomposition Products	Not available.

Possibility of hazardous reactions Not available.

Conditions to avoid Not available.

Section 11. Toxicological Information

Oral LD50 Not available.

Skin corrosion/irritation Not available.

Inhalation LC50 Not available.

Serious eye damage/irritation Not available.

Dermal LD50 Not available.

Respiratory or skin sensitization Not available.

Other information on acute toxicity Not available.

Germ cell mutagenicity Not available.

Reproductive Toxicity Not available.

Aspiration Hazard Not available.

Specific organ toxicity single exposure (GHS) Inhalation - May cause respiratory irritation.

Synergistic effects Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Additional Information RTECS: DJ2981770
To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Teratogenicity Not available.

Signs and symptoms of exposure Stomach - Irregularities - Based on Human Evidence.

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.
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.

PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required / no

conducted.

Persistence and degradability Not available.

Other adverse effects Not available.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal Dispose of material according to all federal, state and local regulations.
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 To Know Components No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components Silybin CAS #: 22888-70-6 Revision Date:

New Jersey Right To Know Components Silybin CAS #: 22888-70-6 Revision Date:

California Prop 65 Components 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