



Section 1. Product and Company Identification

Product Name R,S-Sulforaphane
Product ID S8044
Chemical Name (Synonyms) D,L-Sulforaphane
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 Not a hazardous substance or mixture.

GHS Label elements including precautionary statements

Pictogram

Signal word

Hazard and precautionary statements
Hazard statement
Not a hazardous substance or mixture.
Precautionary statement
Not a hazardous substance or mixture.

HMIS Classification Health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating Health hazard: 0
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects Inhalation: May be harmful if inhaled.
Skin: May be harmful if absorbed through skin.
Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Section 3. Composition/Information on Ingredients

Substances

Formula C₆H₁₁NOS₂

Formula Wt. 177.29

CAS No. 4478-93-7

EC No.

Section 4. First Aid Measures

General advice

Eye Contact

Flush eyes with water as a precaution.

Skin Contact

Wash off with soap and plenty of water.

Inhalation

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

Ingestion

Never give anything by mouth to an unconscious person. Rise mouth with water.

Section 5 . Firefighting Measures

Flash Point

Not available.

Extinguishing Media

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

Firefighting Procedures

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

Unusual Fire Hazards

Carbon oxides, nitrogen oxides (NO_x), and sulfur oxides.

Section 6. Accidental Release Measures

Personal Precautions

Avoid breathing vapors, mist, or gas.

Environmental Precautions

Do not let product enter drains.

Methods and materials for containment and cleanup

Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling

Normal measures for preventive fire protection.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened, must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature: -20°C

Hazardous Decomposition Products

Not available.

Other Remarks

None.

Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS

Contains no substances with occupational exposure limit values.
General industrial hygiene practice.

PERSONAL PROTECTION

Eye/face protection: 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.

Body Protection: 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: Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) 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	Liquid.	Color	Slightly yellowish liquid.
Boiling Point	125°C-135°C	Volatility	Not available.
Melting Point	Not available.	Density	Not available.
Solubility	Soluble in ethanol, DMSO 20mg/mL, methanol, or ethyl acetate. Also soluble 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	Soluble 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 for 2 years. Avoid prolonged contact with moisture and freeze thaw cycles.

Materials To Avoid Strong acids, strong bases.

Hazardous Decomposition Products Not available.

Possibility of hazardous reactions Not available.

Conditions to avoid Keep away from sunlight and heat.

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) Not available.

Synergistic effects Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Additional Information RTECS: Not available.
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 Not available.

Potential Health Effects Inhalation: May be harmful if inhaled.
Skin: May be harmful if absorbed through skin.
Eyes: May cause 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/ not

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.
Contact a licensed professional waste disposal service to dispose of this material. 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 SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components SARA 313: 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 No SARA hazards.

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

Pennsylvania Right To Know Components R,S-Sulforaphane CAS #: 4478-93-7 Revision Date:

New Jersey Right To Know Components R,S-Sulforaphane CAS #: 4478-93-7 Revision Date:

California Prop 65 Components This product does not contain any chemicals known to the 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 1/1/2019

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