

Safety Data Sheet

Date of revision : March 7, 2025

1. Product and company identification	
Product name	D-Leucine
Recommended use	For test research
Name of manufacturer	Yoneyama Yakuhin Kogyo Co., Ltd.
Address	2-3-11 Doshomachi , Chuo-ku, Osaka, 541-0045, Japan
Contact for Information	Sales Division
Telephone number	06-6231-3555
Fax number	06-6223-1093
SDS No.	29471
2. Hazards identification	
GHS Classification	Does not meet the classification criteria.
Label Elements	
Symbol	—
Signal word	—
Hazard statements	—
3. Composition/information on ingredients	
Substance/Mixture	Substance
Chemical name or commercial name	D-Leucine
Chemical formula	C ₆ H ₁₃ NO ₂
Numerical identifier	CAS RN:328-38-1
Ingredients and composition	100%
Others	HS code:2922.49
4. First and measures	
Inhalation	Move to fresh air. If feeling unwell, seek medical advice/attention.
Skin contact	Remove contaminated clothing. Rinse skin with plenty of water or take a shower. If skin irritation persists, seek medical advice/attention.
Eye contact	Rinse eyes cautiously with plenty of water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical advice/attention.
Ingestion	Rinse mouth. Give plenty of water to drink. If feeling unwell, seek medical advice/attention.
5. Fire fighting measures	
Suitable extinguishing media	Water spray, foam fire extinguishing agent, dry chemical extinguisher, carbon dioxide.
Unsuitable extinguishing media	No data.
Specific hazards arising from chemical	No data.
Particular fire fighting	No data.
Special protective actions for fire-fighters	Conduct firefighting from upwind to avoid inhaling hazardous gases. Wear respiratory protection as necessary.
6. Accidental release measure	
Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment when working, operate from upwind, and evacuate people downwind. Wear protective gloves, protective eyewear, and protective clothing.
Environmental precautions	Avoid release into rivers or other bodies of water to prevent environmental impact.
Methods and materials for containment and cleaning up	Collect as much of the spilled material as possible using a method that prevents dust generation, place it in an empty container, and then wash the area with plenty of water.
7. Handling and storage	
Handling	
Technical measures	Install local exhaust ventilation in the handling area. Seal the container tightly after use.
Precautions for safe handling	Do not tip, drop, impact, or drag containers; handle with care.
Incompatible materials	Prevent leaks, spills, and dispersion. Avoid unnecessary dust generation.
Hygiene measures	Wash hands thoroughly after handling.
Storage	
Conditions for safe storage	Keep container tightly sealed. Store in a dry, cool place away from direct sunlight, high temperatures, and humidity. Hygroscopic—store in a controlled environment to prevent moisture absorption.
Safe packaging materials	Polyethylene, Polypropylene.

8. Exposure controls/personal protection	
Exposure limits	—
ACGIH	—
Equipment measures	Handle in a closed system as much as possible or use local exhaust ventilation. Provide hand-washing facilities near the work area.
Protective equipment	
Respiratory protection	Wear a dust mask or a simple dust mask.
Hand protection	Wear rubber gloves.
Eye protection	Wear goggles.
Skin protection	Wear work clothing.
9. Physical and chemical properties	
Physical state	Crystalline powder
Color	White
Odor	No data.
Melting point/Freezing point	268–288 °C
Boiling point	No data.
Combustibility	No data.
Upper/lower explosive limits	No data.
Flash point	No data.
Auto-ignition temperature	No data.
Decomposition temperature	No data.
pH	No data.
Viscosity	No data.
Solubility	21.5 mg/mL
n-Octanol/water partition coefficient	log P = -1.52
Vapor pressure	No data.
Specific gravity	No data.
Vapor density	No data.
Particle characteristics	No data.
10. Stability and reactivity	
Stability	Stable under normal handling conditions.
Possibility of hazardous reaction	No data.
Conditions to avoid	Avoid exposure to sunlight, high temperatures, and high humidity.
Incompatible materials	Strong oxidizers.
Hazardous decomposition products	Nitrogen oxides, carbon monoxide.
11. Toxicological information	
Acute toxicity	LD50 (Rat, Intraperitoneal) = 6,429 mg/kg
Skin corrosion/irritation	No data.
Eye damage/irritation	No data.
Respiratory sensitization	No data.
Skin sensitization	No data.
Germ cell mutagenicity	No data.
Carcinogenicity	No data.
Reproductive toxicity	No data.
Specific target organ toxicity (Single exposure)	No data.
Specific target organ toxicity (Repeated exposure)	No data.
Aspiration hazard	No data.
12. Ecological information	
Hazardous to the aquatic environment	Short-term: No data. Long-term: No data.
Persistence and degradability	No data.
Bioaccumulative potential	No data.
Mobility in soil	No data.
Hazardous to the ozone layer	This substance is not listed in the annexes of the Montreal Protocol.
13. Disposal considerations	
Residual disposal	If there is no way of recycling it must be disposed of in compliance with the respective national and local regulation. It consigns it to the industrial waste disposal trader who has permission.
14. Transport information	
UN Number	—
UN proper shipping name	—
Transport hazard class	—
Packing group	—
Additional identification	Before transportation, ensure that containers are free from leaks. Load them securely to prevent tipping, dropping, or damage. Take necessary precautions to prevent cargo shifting.

15. Regulatory information

Please apply to the regulatory control in each country.

16. Other information

References

National Institute of Technology and Evaluation (NITE)

Attentions

The Safety Data Sheet (SDS) is prepared based on JIS Z7253. All information contained herein is given in good faith and no warranty expressed or implied is made to its accuracy.

The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations and determine whether they are appropriate.