SAFETY DATA SHEET

No. 29801

Identity

DL-Tryptophan

SECTION 1. Company identification

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	:	06-6231-3555 Japan
FAX	:	06-6223-1093 Japan

SECTION2. Hazards identification

GHS Classification Physical hazards	
Pyrophoric solids	Not classified
Health hazards	
_	_
Environmental hazards	
—	—
The item which has not been indicated -	"Not applicable", or " Classification not possible"
Label Elements	
Symbol	
None	
Signal word	
No signal word	
Hazard statement	
None	
Precautionary statements	
None	

SECTION3. Composition/information on ingredients

Substance/Mixture	: Substance
Chemical Name	: DL-Tryptophan
Composition	: 100%
Chemical Formula	$: C_{11}H_{12}N_2O_2$
CAS No	: 54-12-6
Dangerous and hazardous ingredients	:

SECTION4. First aid measures

INHALATION :

Remove the victim from the contamination immediately to fresh air. Keep the victim warm and quiet. If breathing is weak irregular or has stopped, give artificial respiration. If you feel unwell, treatment by a physician as soon as possible

SKIN CONTACT :

Gently rinse the affected skin with plenty of water while removing contaminated clothing and shoes. If irritation persists, treatment by a physician as soon as possible.

EYE CONTACT :

Gently rinse the affected eyes with clean water for at least 15 minutes.

Treatment by a physician as soon as possible.

INGESTION :

Do not induce vomiting. If the victim is responsive, give one or two glasses of milk or water. Never give anything by mouth to someone who is unconscious or convulsing. Treatment by a physician as soon as possible. Anticipated acute and delayed symptoms :

If in eyes: May cause irritation. If on skin: May cause irritation. If ingestion: May cause dizziness and headache if ingested a lot. If inhalation: May cause irritating to upper respiratory tract.

SECTION5. Fire fighting measures

Suitable extinguishing media:

Water spray, Chemical form, Dry chemical powder, Carbon dioxide

Unsuitable extinguishing media :

No information found.

Specific hazards arising from chemical :

Gives off irritating or toxic fumes (or gases) in a fire.

Particular fire fighting :

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out.

Special protective actions for fire-fighters :

Wear protective clothing, respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

SECTION6. Accidental release measure

Personal precautions, protective equipment and emergency procedures :

Restrict access area. Provide adequate protective equipment and ventilation. Remove sources of heat and flame. Do not touch spilled material. Stop or reduce leak if safe to do so.

Environmental precautions :

Prevent material from entering sewers or confined spaces.

Removal measure :

Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder.

SECTION7. Handling and storage

Precautions for safe handling :

Prevent contact with skin and eyes by using adequate personal protective equipment.

Conditions for safe storage :

Keep tightly closed. Keep away from incompatible substances. Store in cool dry place.

Incompatible materials :

Strong oxidizing agents.

Packaging compatibilities :

Polypropylene, Polyethylene, Glass.

SECTION8. Exposure controls/personal protection

Exposure limits : ACGIH, OSHA: Not est	ablished.
Equipment measures :	
Use local exhaust ventilat	tion. Eye wash stations and safety showers must be immediately available.
Protective equipment.	
Respiratory protection	: Air – supplied or self – contained NIOSH approved breathing apparatus.
Hand protection	: Rubber gloves
Eye protection	: Safety goggles, face shield
Skin protection	: Protective clothing, rubber boots

SECTION9. Physical and chemical properties

Appearance	:	White crystalline powder.
Odor	:	No information found.
pH.	:	No information found.
Melting point	:	$264^{\circ}C$ (decomposition)
Boiling point	:	No information found.
Flash point	:	No information found.
Upper/lower explosive limits	:	No information found.
Vapor pressure	:	No information found.
Vapor density	:	No information found.
Specific gravity	:	No information found.
Solubility	:	Soluble in water. $(0.25g/100g, 30^{\circ}C)$
Partition coefficient: n-Octanol/water	:	No information found.
Auto-ignition temperature	:	No information found.
Decomposition temperature	:	264°C

SECTION10. Stability and reactivity

Stability :

Stable under ordinary conditions of use and storage. (Unstable under strong acid existence.) Possibility of hazardous reactions :

No information found.

Conditions to avoid :

Sunlight, High temperature, High humidity

 $Incompatible\ materials:$

Strong oxidizing agents.

Hazardous decomposition products :

Carbon monoxide, carbon dioxide.

SECTION 11. Toxicological information

Acute toxicity	: No information found. (Classification not possible)
Skin corrosion/irritation	: No information found. (Classification not possible)
Serious eye damage/eye irritation	: No information found. (Classification not possible)
Respiratory or skin sensitization	: No information found. (Classification not possible)
Germ cell mutagenicity	: No information found. (Classification not possible)
Carcinogenicity	: Not listed (NTP, IARC, OSHA) (Classification not possible)

Toxic to reproduction

Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Aspiration hazard

- : No information found. (Classification not possible)

SECTION12. Ecological information

:	No information found.
:	No information found.
:	No information found.
:	No information found.
	:

SECTION13. Disposal considerations

It consigns it to the industrial waste disposal trader who has permission. Consult Waste Management Authority for disposal.

SECTION14. Transport information

UN number	:	Not applicable.
Transport hazard class	:	Not applicable.

SECTION15. Regulatory information

Please apply to the regulatory control in each country.

SECTION16.Other information

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.