



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 15-Feb-2023 Revision Number 2.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	PTH-	L-tyrosine Standa	ard		
Product Code	162-0)8691			
Manufacturer	1-2 Dos Chuo-k Phone: Fax: +8	LM Wako Pure Chemic shomachi 3-Chome u, Osaka 540-8605, Ja +81-6-6203-3741 81-6-6203-5964	apan		
Supplier	1-2 Do: Phone: Fax: +8	LM Wako Pure Chemic shomachi 3-Chome, Cl +81-6-6203-3741 81-6-6203-2029	nuo-ku, Osaka 54	0-8605, Japan	
Emergency telephone n Recommended uses and		5203-3741 / +81-3-327 earch use only	0-8571		
restrictions on use		Caron use only			
	Sectio	n 2: HAZARDS I	DENTIFICAT	ION	
GHS classification Classification of the sub Not a hazardous substand			monized System	(GHS)	
Pictograms Signal word	None				
Hazard statements Not a hazardous subs	tance or mixture ac	cording to the Globally	Harmonized Syst	em (GHS)	
Precautionary statemen • Not applicable					
Precautionary statemen • Not applicable	ts-(Response)				
• Not applicable	ts-(Storage)				
Precautionary statemen • Not applicable	ts-(Disposal)				
Others Other hazards	Not available				
Sec	tion 3: COMP	OSITION/INFOR	MATION ON	INGREDIENTS	1
Single Substance or Mix					
Formula	C16H1	4N2O2S			
Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Phenylthiohydantoin-tyro sine	99.0	298.36	N/A	N/A	4332-95-0
Note on ISHL No.:	* in the	table means announce	ed chemical subst	ances.	

Impurities and/or Additives:

Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and

then gargle In places other than those specified, should not be smoking or eating and drinking Should not be brought contaminated protective equipment and gloves to rest stops Deny unnecessary entry of non-emergency personnel to the handling area

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

<u>Storage</u>

Safe storage conditions

Storage conditions Safe packaging material Incompatible substances Keep container protect from light tightly closed. Store in a cool (2-10 °C) place. Glass Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment Respiratory protection Hand protection Eye protection Skin and body protection

Dust mask Protection gloves protective eyeglasses or chemical safety goggles Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color	White - nearly white
Appearance	crystalline powder - powder
Odor	no data available
Melting point/freezing point	216 °C
Boiling point, initial boiling point and boiling range	no data available
Flammability	no data available
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or	
explosive limits	
Upper:	no data available
Lower:	no data available
Flash point	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
рН	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Solubilities	ethyl acetate : soluble . water : practically insoluble,or insoluble
n-Octanol/water partition coefficient:(log Pow)	no data available
Vapour pressure	no data available
Specific Gravity / Relative density	no data available
Vapour density	no data available
Particle characteristics	no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available Chemical stability May be altered by light. Hazardous reactions None under normal processing Conditions to avoid Extremes of temperature and direct sunlight Incompatible materials Strong oxidizing agents Hazardous decomposition products Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides (SOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Skin irritation/corrosion Serious eye damage/ irritation Respiratory or skin sensitization **Reproductive cell mutagenicity** Carcinogenicity

Reproductive toxicity STOT-single exposure STOT-repeated exposure Aspiration hazard

no data available no data available no data available no data available

no data available

no data available no data available no data available no data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

Other data

no data available

Persistence and degradability **Bioaccumulative potential** Mobility in soil Hazard to the ozone layer

No information available No information available No information available No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID **UN number** Proper shipping name: **UN classfication** Subsidiary hazard class Packing group Marine pollutant

Not regulated

Not applicable

IMDG UN number Proper shipping name: UN classfication Subsidiary hazard class	Not regulated -
Packing group	
Marine pollutant (Sea) Transport in bulk according to	Not applicable
Annex II of MARPOL 73/78 and	
the IBC Code	
ΙΑΤΑ	Not regulated
UN number	-
Proper shipping name: UN classfication	
Subsidiary hazard class	
Packing group Environmentally Hazardous Substance	Not applicable

Section 15: REGULATORY INFORMATION

International Inventories	
EINECS/ELINCS	-
TSCA	-
Japanese regulations	
Fire Service Act	Not applicable
Poisonous and Deleterious	Not applicable
Substances Control Law	
Industrial Safety and Health Act	Not applicable
Regulations for the carriage	Not applicable
and storage of dangerous	
goods in ship	
Civil Aeronautics Law	Not applicable
Pollutant Release and Transfer	Not applicable
Register Law	
(~2023.3.31)	
Pollutant Release and Transfer	Not applicable
Register Law	
(2023/4/1~) Export Trade Control Order	Not applicable
Export Trade Control Order	Not applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
	etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet