



SAFETY DATA SHEET

According to JIS Z 7253:2019 Issue Date 10-Jul-2025 Revision Number 2.04

Section 1: PRODUCT AND COMPANY IDENTIFICATION

	Lipopolysaccharide, from Bordetella pertussis Tohama (by ultracentrifugation)
Product Code	126-06331

Supplier FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan

Phone: +81-6-6203-3741 Fax: +81-6-6203-2029

Emergency telephone number

+81-6-6203-3741 / +81-3-3270-8571

Recommended uses

For research use only

Restrictions on use Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture
Acute toxicity - Oral

Specific target organ toxicity (single exposure)

Category 2 Category 2





Signal word

Danger

Hazard statements

H300 - Fatal if swallowed

H371 - May cause damage to organs

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary statements-(Response)

- IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth

Precautionary statements-(Storage)

Store locked up

Precautionary statements-(Disposal)

· Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Lipopolysaccharide, from	-	N/A	N/A	N/A	N/A-12-0633-1
Bordetella pertussis					
Tohama (by					
ultracentrifugation)					

Note on ISHL No.:

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

^{*} in the table means announced chemical substances.

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. This product should be handled at Biological Safety Level 2.

Storage

Safe storage conditions

Storage conditions Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.

Safe packaging material Glass

Incompatible substances 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 Dust mask (JIS T 8151)

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color
Appearance
Cdor
Melting point/freezing point
Rolling point, initial boiling point and boiling range
Flammability
Flammability
Flammability (solid, gas):

White - slight brown
crystals - powder
no data available
no data available
no data available
no data available

Upper/lower flammability or explosive limits

Upper: no data available
Lower: no data available

no data available Flash point no data available **Auto-ignition temperature: Decomposition temperature:** no data available рΗ no data available Viscosity (coefficient of viscosity) no data available no data available **Dynamic viscosity** Solubilities water: soluble. n-Octanol/water partition coefficient:(log Pow) no data available no data available Vapour pressure 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

*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Acute toxicity no data available

Skin irritation/corrosionno data availableSerious eye damage/ irritationno data availableRespiratory or skin sensitizationno data availableReproductive cell mutagenicityno data availableCarcinogenicityno data available

Reproductive toxicityno data availableSTOT-single exposureno data availableSTOT-repeated exposureno data availableAspiration hazardno data available

Section 12: ECOLOGICAL INFORMATION

*NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

Ecotoxicity no data available

Other data no data available

Persistence and degradability
Bioaccumulative potential
No information available
No information available

Mobility in soil No information available No information available Hazard to the ozone layer

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 UN3462

Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Lipopolysaccharide)

UN classfication

Subsidiary hazard class

Packing group Ш

Marine pollutant Not applicable

IMDG

UN number UN3462

Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Lipopolysaccharide)

UN classfication

Subsidiary hazard class

Packing group Ш

Marine pollutant (Sea) Not applicable

No information available Transport in bulk according to

Annex II of MARPOL 73/78 and

the IBC Code

IATA

UN number UN3462

Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Lipopolysaccharide)

UN classfication 6 1

Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act Not applicable Poisonous and Deleterious Not applicable **Substances Control Law**

Industrial Safety and Health Act Not applicable

Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regulations for the carriage and storage of dangerous

Regarding Transport by Ship and Storage, Attached Table 1)

goods in ship

Toxic and Infectious Substances (Ordinance Art.194, MITL Nortification for Air **Civil Aeronautics Law**

Transportation of Explosives etc., Attached Table 1)

Pollutant Release and Transfer Not applicable

Register Law (2023.4.1-)

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN) https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput

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

Record of SDS revisions

The following contents were revised. Composition/information on ingredients. Handling

and storage. Stability and reactivity. Regulatory information.

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 Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet