



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 03-Apr-2023 Revision Number 1.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	(Cyanomethyl)triphenylphosphonium Chloride	
Product Code	321-42162,329-42163	
Manufacturer	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan	
Supplier	Phone: +81-6-6203-3741 Fax: +81-6-6203-5964 FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741	
Emergency telephone number Recommended uses Restrictions on use	Fax: +81-6-6203-2029 +81-6-6203-3741 / +81-3-3270-8571 For research use only Seek expert judgment when using for purposes other than those recommended.	

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Acute toxicity - Oral Skin corrosion/irritation Serious eye damage/eye irritation

Category 4 Category 2 Category 2A

Pictograms



Warning

Hazard statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H302 Harmful if swallowed

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- · Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements-(Response)

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

- If eye irritation persists: Get medical advice/attention
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary statements-(Storage)

Not applicable 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

Formula

C20H17CINP

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Cyanomethyl	98.0	337.78	N/A	N/A	4336-70-3
triphenylphosphonium					
chloride					
	* •	table measure and a second	· · · · · · · · · · · · · · · · · · ·		

Note on ISHL No.: * in the table means announced chemical substances.

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.

Storage

Safe storage conditions	
Storage conditions	Keep container protect from light tightly closed. Store in a cool (2-10 °C) place. Packed with an inert gas. Store locked up.
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
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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 T8151)
Hand protection	chemical protective gloves (JIS T 8116)
Eye protection	protective eyeglasses or chemical safety goggles
Skin and body protection	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 Appearance Odor Melting point/freezing point Boiling point, initial boiling point and boiling range Flammability Evaporation rate: Flammability (solid, gas):

White - slightly brown crystals or crystalline powder no data available 275 °C no data available no data available no data available no data available

- Upper/lower flammability or explosive limits Upper: Lower: Flash point Auto-ignition temperature: **Decomposition temperature:** pН Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density **Particle characteristics**
- no data available acetone and Diethyl ether : miscible . no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivityno data availableChemical stabilityMay be altered by light.Hazardous reactionsMay be altered by light.None under normal processingStrong oxoidConditions to avoid
Extremes of temperature and direct sunlightStrong oxidizing agentsIncompatible materials
Strong oxidizing agentsStrong oxidizing agentsHazardous decomposition products
Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Phosphorus oxide, Halides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

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 no data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	No information available
Other data	no data available
Persistence and degradability Bioaccumulative potential Mobility in soil	No information available No information available No information available

Hazard to the ozone layer

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	Not regulated -
Marine pollutant	Not applicable
IMDG UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group	Not regulated -
Marine pollutant (Sea) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable No information available
IATA UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group	Not regulated -
Environmentally Hazardous Substance	Not applicable

Section 15: REGULATORY INFORMATION

International Inventories EINECS/ELINCS TSCA	Listed -
Japanese regulations	
Fire Service Act	Not applicable
Poisonous and Deleterious	Deleterious Substances 3rd. Grade
Substances Control Law	
Industrial Safety and Health Act	tNot 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	
(2023.4.1-)	
Export Trade Control Order	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2) (~2024.3.31)	Pollutant Release and Transfer Register Law (2023.4.1-)
Cyanomethyl triphenylphosphonium chloride 4336-70-3 (98.0)	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
Record of SDS revisions	The following contents were revised. Prodauct and company Identification. Exposure controls/personal protection. 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 Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet