



According to OSHA HazCom 2012 Revision date 18-Feb-2022 Revision Number 2.04

Wako

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product Name

Tricyclohexylphosphine

Other means of identification Product Code(s) UN number or ID number

203-19881,209-19883,201-19882 UN3077

Recommended use of the chemical and restrictions on useRecommended UseFor research use only.Uses advised againstNo information available

Details of the supplier of the safety data sheet Distributor

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FUJIFILM Wako Chemicals GmbH Fuggerstrasse 12, D-41468 Neuss, Germany Phone: +49 (0)2131-311 158 Fax: +49 (0)2131-311 100

2. HAZARDS IDENTIFICATION

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



Signal word

Warning

Hazard statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H302 Harmful if swallowed
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

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 Avoid release to the environment

Category 4 Category 2 Category 2A Category 1 Category 1

Precautionary statements-(Responsion of the end of the	vith water for sev Get medical adv of soap and wat h before reuse DN CENTER or DN CENTER or	vice/attention er If skin irritation occurs: doctor/physician if you fee	Get medical advice/atte	-
Others Other hazards	Not available)		
3. C	OMPOSITIO	N/INFORMATION ON		
Single Substance or Mixture	Substance			
Formula	C18H33P			
Chemical Name		Molecular weight	CAS RN	Weight-%
Tricyclohexylphosphir	ne	280.43	2622-14-2	95.0
Impurities and/or Additives:	Not applicab	le		
	4 . F	FIRST AID MEASUR	ES	
First aid measures				
Eye contact		ghly with plenty of water f sult a physician.	or at least 15 minutes, li	fting lower and upper
Skin contact	Wash skin with soap and water.			
Inhalation	Remove to fresh air.			
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.			
Most important symptoms and ef	ffects, both acı	ute and delayed		
Symptoms	No information available.			
Indication of any immediate med	ical attention a	nd special treatment ne	eded	
Note to physicians	Treat sympto	omatically.		
	5. FIR	E-FIGHTING MEAS	URES	
Suitable Extinguishing media Use extinguishing measures that ar Specific hazards arising from the No information available.		o local circumstances and	the surrounding environ	ment.

Explosion dataSensitivity to Mechanicalnone.Impactsensitivity to Static Dischargenone.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures			
Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation, especially in confined areas.		
Environmental precautions			
Environmental precautions	See Section 12 for additional ecological information.		
Methods and material for containment and cleaning up			
Methods and material for containment and cleaning up	Sweep up and gather scattered particles, and collect it in an empty airtight container.		
Methods for cleaning up	Pick up and transfer to properly labeled containers.		
7. HANDLING AND STORAGE			
Precautions for safe handling			

Technical measures Protective measures	Avoid contact with strong oxidizing agents. Handle in accordance with good industrial hygiene and safety practice.		
Conditions for safe storage, including any incompatibilities			
Storage conditions	Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Packed with an inert gas.		
Packaging materials	Glass.		
Incompatible materials	Strong oxidizing agents.		

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

Personal protective equipment Dust mask Respiratory protection Dust mask Hand protection Protection gloves Eye protection protective eyeglasses or chemical safety goggles Skin and body Long-sleeved work clothes

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Color Appearance Odor

White - slightly yellow flakes no data available pН Melting point/freezing point Boiling point, initial boiling point and boiling range Flash point Evaporation rate: Flammability (solid, gas): Upper/lower flammability or explosive limits Upper: Lower: Vapour pressure Vapour density Specific Gravity / Relative density **Solubilities** n-Octanol/water partition coefficient:(log Pow) Auto-ignition temperature: Decomposition temperature: Viscosity (coefficient of viscosity) Dynamic viscosity

76 - 78 °C no data available dichloromethane : soluble . no data available no data available no data available no data available no data available

no data available

10. STABILITY AND REACTIVITY

Stability

Chemical stability
ReactivityMay be altered by light.
no data availableHazardous reactions
None under normal processingno data availableConditions to avoid
Extremes of temperature and direct sunlightIncompatible materials
Strong oxidizing agentsHazardous decomposition products
Carbon monooxide (CO), Carbon dioxide (CO2), Phosphorus oxide

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

12. ECOLOGICAL INFORMATION

<u>Ecotoxicity</u> No information available

Persistence and degradability

No information available

Bioaccumulative potential No information available

<u>Mobility in soil</u> Other Data	No information available No information available			
	13. DISPOSAL CONSIDERATIONS			
Waste treatment methods				
Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.			
Precautionary including method disposing contaminated packaging	of Disposal should be in accordance with applicable regional, national and local laws and ng regulations.			
14. TRANSPORT INFORMATION				
	1103077			

UN/ID No	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (Tricyclohexylphosphine)
UN classfication	9
Subsidiary hazard class	
Packing group	
Marine pollutant	Yes
IATA	
UN/ID No	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (Tricyclohexylphosphine)
UN classfication	9
Subsidiary hazard class	
Packing group	
Environmentally Hazardous	Yes
Substance	
IMDG	
UN/ID No	UN3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (Tricyclohexylphosphine)
UN classfication	9
Subsidiary hazard class	
Packing group	
Marine pollutant (Sea)	Yes

15. REGULATORY INFORMATION			
International Inventorie	6		
TSCA	Listed		
DSL	-		
NDSL	Listed		
EINECS/ELINCS	Listed		
ENCS	Listed		
Legend:			
TSCA - United States Toxic S	Substances Control Act Section 8(b) In	ventorv	

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain

any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any chemicals regulated by Proposition 65

U.S. State Right-to-Know Regulations

U.S. EPA Label Information	
EPA Pesticide Registration	Not applicable
Number	

16. OTHER INFORMATION

Issue Date	18-May-2021
Revision date	18-Feb-2022
Revision Note	
No information available	
<u>Disclaimer</u>	

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, use, processing, storage, transportation, disposal and release 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.

End of Safety Data Sheet