

## SAFETY DATA SHEET

According to JIS Z 7253:2012  
**Revision Date** 28-Jun-2019  
 Version 5.02

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	2,4,6-Trichlorophenol Standard
<b>Product code</b>	203-15481
<b>CAS RN</b>	88-06-2
<b>Formula</b>	C <sub>6</sub> H <sub>2</sub> Cl <sub>3</sub> OH
<b>Manufacturer</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
<b>Supplier</b>	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
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses and restrictions on use</b>	For research purposes

## Section 2: HAZARDS IDENTIFICATION

**GHS classification****Classification of the substance or mixture**

Acute toxicity - Oral

Skin corrosion/irritation

Serious eye damage/eye irritation

Carcinogenicity

Aquatic environment (acute hazard)

Category 4

Category 2

Category 2A

Category 2

Category 1

**Pictograms**

Signal word

Warning

**Hazard statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H351 - Suspected of causing cancer

H400 - Very toxic to aquatic life

**Precautionary statements-(Prevention)**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required.
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product

- Avoid release to the environment

**Precautionary statements-(Response)**

- IF exposed or concerned: Get medical advice/attention
- 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.
- Collect spillage

**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** C<sub>6</sub>H<sub>2</sub>Cl<sub>3</sub>OH

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
2,4,6-Trichlorophenol	99.0	197.45	(3)-931	公表	88-06-2

**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 (CO<sub>2</sub>), Foam, Extinguishing powder, Sand

**Unsuitable extinguishing media**

No information available

**Special extinguishing method**

No information available

**Specific hazards arising from the chemical product**

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

**Protection of 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 contaminant 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.

**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 hand- and 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

**Hand protection** Protection gloves

**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** white - reddish brown

**Appearance** crystals - crystalline powder or mass

### Odor

Strongly, characteristic odor

### pH

No data available

<b>Melting point/freezing point</b>	65 - 69 °C
<b>Boiling point, initial boiling point and boiling range</b>	246 °C
<b>Flash point</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Upper/lower flammability or explosive limits</b>	
<b>Upper :</b>	No data available
<b>Lower :</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Specific Gravity / Relative density</b>	1.49
<b>Solubilities</b>	Ethanol and acetone : Very soluble. water : practically insoluble,or insoluble .
<b>n-Octanol/water partition coefficient:(log Pow)</b>	3.87
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity (coefficient of viscosity)</b>	No data available
<b>Dynamic viscosity</b>	No data available

## Section 10: STABILITY AND REACTIVITY

### Stability

<b>Stability</b>	May be altered by light.
<b>Reactivity</b>	No data available

### Hazardous reactions

None under normal processing

### Conditions to avoid

Extremes of temperature and direct sunlight

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Halides

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2,4,6-Trichlorophenol	820 mg/kg ( Rat )	400 mg/kg ( Rat )	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
2,4,6-Trichlorophenol	LD50(oral,rat):820mg/kg(EHC 93(1989)、PATY 5th(2001)).	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust-source information	Acute toxicity -inhalation mist-source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

### Skin irritation/corrosion

Chemical Name	Skin corrosion irritation source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

Chemical Name	Serious eye damage source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

### Respiratory or skin sensitization

Chemical Name	Respiratory, Skin sensitization source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

### Reproductive cell mutagenicity

Chemical Name	Mutagenic source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

**Carcinogenicity**

Chemical Name	Carcinogenicity source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
2,4,6-Trichlorophenol 88-06-2	Reasonably Anticipated	Group 2B		Group 2B

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

**STOT-single exposure**

Chemical Name	STOT -single exposure- source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

**STOT-repeated exposure**

Chemical Name	STOT -repeated exposure- source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
2,4,6-Trichlorophenol	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2,4,6-Trichlorophenol	EC50:Desmodesmus subspicatus 11.2 mg/L 96 h	LC50:Fundulus heteroclitus 0.61 mg/L 96h	EC50:Daphnia magna 1.8 - 2.6 mg/L 48 h

**Other data**

Chemical Name	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
2,4,6-Trichlorophenol	LC50(Guppy):0.61 mg/L/96h(Ministry of the Environment Risk Assessment Vol. 2 , 2003).	Based on the NITE GHS classification results.

<b>Persistence and degradability</b>	Degree of decomposition : 83 % by BOD
<b>Bioaccumulative potential</b>	No information available
<b>Mobility in soil</b>	No information available
<b>Hazard to the ozone layer</b>	No information available
<b>Mobility</b>	

## 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**

<b>UN number</b>	UN2020
<b>Proper shipping name:</b>	Chlorophenols, solid (2,4,6-Trichlorophenol)
<b>UN classification</b>	6.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Marine pollutant</b>	Yes

**IMDG**

<b>UN number</b>	UN2020
<b>Proper shipping name:</b>	Chlorophenols, solid (2,4,6-Trichlorophenol)
<b>UN classification</b>	6.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Marine pollutant (Sea)</b>	Yes
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available

**IATA**

<b>UN number</b>	UN2020
<b>Proper shipping name:</b>	Chlorophenols, solid (2,4,6-Trichlorophenol)
<b>UN classification</b>	6.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Environmentally Hazardous Substance</b>	Yes

<b>Section 15: REGULATORY INFORMATION</b>
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**International Inventories**

<b>EINECS/ELINCS</b>	Listed
<b>TSCA</b>	Listed

**Japanese regulations**

<b>Fire Service Act</b>	Not applicable
<b>Poisonous and Deleterious Substances Control Law</b>	Not applicable
<b>Industrial Safety and Health Act</b>	Not applicable
<b>Regulations for the carriage and storage of dangerous goods in ship</b>	Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
<b>Civil Aeronautics Law</b>	Toxic and Infectious Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
<b>Pollutant Release and Transfer Register Law</b>	Class 1
<b>Class 1 - No.</b>	287
<b>Export Trade Control Order</b>	Not applicable
<b>Air Pollution Control Law</b>	Hazardous Air Pollutants

<b>Section 16: OTHER INFORMATION</b>
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**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 Organic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd.  
 Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
 etc

**Disclaimer**

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(2014). \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**