

1. Material Identification

Product Name : 2,4-Dichlorophenol

Catalog Number : io-2179

CAS Number : 120-83-2

Identified uses : Laboratory chemicals, manufacture of chemical compounds

Company : IonZ

>> R&D Use only

2. Hazards Identification

GHS Classification:

Flammable liquid (category 2)

Acute toxicity, oral (Category 3)

Acute toxicity, dermal (Category 3)

Acute toxicity, inhalation (Category 3)

Specific target organ toxicity, single exposure (Category 1)

Pictogram(s)



GHS Hazard Statements

>> H300 (14.7%): Fatal if swallowed [Danger Acute toxicity, oral]

>> H302 (99.6%): Harmful if swallowed [Warning Acute toxicity, oral]

>> H311 (100%): Toxic in contact with skin [Danger Acute toxicity, dermal]

>> H314 (100%): Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]

>> H318 (44.4%): Causes serious eye damage [Danger Serious eye damage/eye irritation]

>> H331 (21.6%): Toxic if inhaled [Danger Acute toxicity, inhalation]

>> H411 (99.6%): Toxic to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]

Precautionary Statement Codes

>> P260, P261, P262, P264, P264+P265, P270, P271, P273, P280, P301+P316, P301+P317, P301+P330+P331, P302+P352, P302+P361+P354, P304+P340, P305+P354+P338, P316, P317, P321, P330, P361+P364, P363, P391, P403+P233, P405, and P501

NFPA 704 Diamond



NFPA Health Rating

>> 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA Fire Rating

>> 1 - Materials that must be preheated before ignition can occur. Materials require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur.

NFPA Instability Rating

- >> O – Materials that in themselves are normally stable, even under fire conditions.

Health Hazards:

- >> Tremors, convulsions, shortness of breath, inhibition of respiratory system. (USCG, 1999)
- >> Special Hazards of Combustion Products: Toxic gases can be evolved.
- >> Behavior in Fire: Solid melts and burns. (USCG, 1999)
- >> Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Finely dispersed particles form explosive mixtures in air.

3. Composition/Information On Ingredients

Chemical name : 2,4-Dichlorophenol

CAS Number : 120-83-2

Molecular Formula : C₆H₄Cl₂O

Molecular Weight : 163.0000 g/mol

4. First Aid Measures

First Aid:

- >> EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.
- >> SKIN: IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. IMMEDIATELY call a hospital or poison control center even if no symptoms (such as redness or irritation) develop. IMMEDIATELY transport the victim to a hospital for treatment after washing the affected areas.
- >> INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. IMMEDIATELY call a physician and be prepared to transport the victim to a hospital even if no symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.
- >> INGESTION: DO NOT INDUCE VOMITING. Phenols are very toxic poisons AND corrosive and irritating, so that inducing vomiting may make medical problems worse. IMMEDIATELY call a hospital or poison control center and locate activated charcoal, egg whites, or milk in case the medical advisor recommends administering one of them. If advice from a physician is not readily available and the victim is conscious and not convulsing, give the victim a glass of activated charcoal slurry in water or, if this is not available, a glass of milk, or beaten egg whites and IMMEDIATELY transport victim to a hospital. If the victim is convulsing or unconscious, do not give anything by mouth, assure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital.
- >> OTHER: Since this chemical is a known or suspected carcinogen you should contact a physician for advice regarding the possible long term health effects and potential recommendation for medical monitoring. Recommendations from the physician will depend upon the specific compound, its chemical, physical and toxicity properties, the exposure level, length of exposure, and the route of exposure. (NTP, 1992)

First Aid Measures

Inhalation First Aid

- >> Fresh air, rest. Half-upright position. Refer immediately for medical attention.

Skin First Aid

- >> Wear protective gloves when administering first aid. Remove contaminated clothes. To remove substance use polyethylene glycol 400 or vegetable oil. Rinse skin with plenty of water or shower. Refer immediately for medical

attention.

Eye First Aid

>> Rinse with plenty of water (remove contact lenses if easily possible). Refer immediately for medical attention.

Ingestion First Aid

>> Rinse mouth. Do NOT induce vomiting. Refer immediately for medical attention.

5. Fire Fighting Measures

>> Fire extinguishing agents: water or foam may be used even though frothing occurs.

>> Fire Extinguishing Agents Not to Be Used: Water or foam may cause frothing.

>> Fire Extinguishing Agents: Water, foam, carbon dioxide, dry chemical (USCG, 1999)

>> Use water spray, foam, powder, carbon dioxide.

6. Accidental Release Measures

Isolation and Evacuation:

Isolation and evacuation measures to take when a large amount of this chemical is accidentally released in an emergency.

>> Excerpt from ERG Guide 153 [Substances – Toxic and/or Corrosive (Combustible)]:

>> IMMEDIATE PRECAUTIONARY MEASURE: Isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.

>> SPILL: Increase the immediate precautionary measure distance, in the downwind direction, as necessary.

>> FIRE: If tank, rail tank car or highway tank is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. (ERG, 2024)

Spillage Disposal:

Methods for containment and safety measures to protect workers dealing with a spillage of this chemical.

>> Personal protection: chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

7. Handling And Storage

Safe Storage:

>> Fireproof. Store in an area without drain or sewer access. Provision to contain effluent from fire extinguishing. Separated from strong oxidants and food and feedstuffs. Ventilation along the floor.

Storage Conditions:

>> SRP: Local exhaust ventilation should be applied wherever there is an incidence of point source emissions or dispersion of regulated contaminants in the work area. Ventilation control of the contaminant as close to its point of generation is both the most economical and safest method to minimize personnel exposure to airborne contaminants.

8. Exposure Control/ Personal Protection

>> ERPG-1: 0.2 ppm – one hour exposure limit: 1 = mild transient health effects or objectionable odor [AIHA]

>> ERPG-2: 2 ppm – one hour exposure limit: 2 = impaired ability to take protective action [AIHA]

>> ERPG-3: 20 ppm – one hour exposure limit: 3 = life threatening health effects [AIHA]

Inhalation Risk:

>> A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20 °C; when in molten form, however, evaporation will be much faster.

Effects of Short Term Exposure:

>> The substance is corrosive to the eyes, skin and respiratory tract. Corrosive on ingestion. The hot liquid may cause severe skin burns. Exposure to the molten substance may result in extensive skin absorption and rapid death. Inhalation of the vapour may cause lung oedema. Medical observation is indicated. The substance may cause effects on the central nervous system.

Fire Prevention

>> NO open flames. Prevent build-up of electrostatic charges (e.g., by grounding).

Exposure Prevention

>> PREVENT DISPERSION OF DUST! PREVENT GENERATION OF MISTS! AVOID ALL CONTACT! IN ALL CASES CONSULT A DOCTOR!

Inhalation Prevention

>> Use local exhaust or breathing protection.

Skin Prevention

>> Protective gloves. Protective clothing.

Eye Prevention

>> Wear face shield or eye protection in combination with breathing protection.

Ingestion Prevention

>> Do not eat, drink, or smoke during work.

9. Physical And Chemical Properties

Molecular Weight:

>> 163.00

Exact Mass:

>> 161.9639201

Physical Description:

>> 2,4-dichlorophenol is a colorless crystalline solid with a medicinal odor. Melting point 45 °C. Sinks in water. Strong irritant to tissues; toxic by ingestion.

>> COLOURLESS CRYSTALS WITH CHARACTERISTIC ODOUR.

Color/Form:

>> COLORLESS CRYSTALS OR NEEDLES

Odor:

>> Strong medicinal

Boiling Point:

>> 410 °F at 760 mmHg (NTP, 1992)

>> 210.0 °C

Melting Point:

>> 113 °F (NTP, 1992)

>> 45.0 °C

Flash Point:

>> 237 °F (NTP, 1992)

>> 113 °C o.c.

Solubility:

>> less than 0.1 mg/mL at 64 °F (NTP, 1992)

>> Solubility in water, g/100ml at 20 °C: 0.45 (poor)

Density:

>> 1.4 at 59 °F (USCG, 1999) – Denser than water; will sink

>> 1.4 g/cm³

Vapor Density:

>> 5.62 (NTP, 1992) – Heavier than air; will sink (Relative to Air)

>> Relative vapor density (air = 1): 5.6

Vapor Pressure:

>> 1 mmHg at 127 °F (NTP, 1992)

>> Vapor pressure, Pa at 20 °C: 10

LogP:

>> log Kow = 3.06

>> 3.17

Autoignition Temperature:

>> 500 °C

Decomposition:

>> When heated to decomposition ... it emits highly toxic fumes of /hydrogen chloride/.

Heat of Vaporization:

>> 13,230.4 cal/mole

Odor Threshold:

>> Odor detection in water: 2.10X10⁻¹ ppm (chemically pure)

Dissociation Constants:

>> pKa = 7.89

10. Stability And Reactivity

>> Insoluble in water.

11. Toxicological Information

Toxicity Summary:

>> Chlorophenols have moderately high lipophilicity. Absorption through the gastrointestinal tract is by simple diffusion and is expected to be both rapid and virtually complete. The chlorophenols are also readily absorbed after dermal exposure. Chlorophenols uncouple mitochondrial oxidative phosphorylation and produce convulsions. At low concentrations, uncoupling produces stimulation of state 4 (resting state) respiration as a result of increased adenosine triphosphatase (ATPase) activity in the absence of a phosphate acceptor. Inhibition of state 3 (active) respiration is also observed. At moderate concentrations, resting respiration is neither stimulated nor inhibited. Significant inhibition of respiration, associated with a breakdown of the electron transport process and decreased ATPase activity, occurs at very high concentrations. (L159)

EPA Provisional Peer-Reviewed Toxicity Values:

This section provides the EPA Provisional Peer-Reviewed Toxicity Values (PPRTVs) and links of related assessment documents.

Chemical Substance

>> 2,4-Dichlorophenol

Reference Dose (RfD), Subchronic

>> 2×10^{-2} mg/kg-day

PPRTV Assessment

>> PDF Document

Weight-Of-Evidence (WOE)

>> Inadequate information to assess carcinogenic potential

Last Revision

>> 2007

USGS Health-Based Screening Levels for Evaluating Water-Quality:

This section provides the USGS Health-Based Screening Levels for Evaluating Water-Quality data.

Chemical

>> 2,4-Dichlorophenol

Noncancer HBSL (Health-Based Screening Level)[μg/L]

>> 20

Reference

>> Smith, C.D. and Nowell, L.H., 2024. Health-Based Screening Levels for evaluating water-quality data (3rd ed.). DOI:10.5066/F71C1TWP

Evidence for Carcinogenicity:

Evidence that this chemical does or may cause cancer. The information here is collected from various sources by the Hazardous Substances Data Bank (HSDB).

>> Evaluation: There is limited evidence in humans for the carcinogenicity of combined exposures to polychlorophenols or to their sodium salts. There is evidence suggesting lack of carcinogenicity of 2,4-dichlorophenol in experimental animals. ... Overall evaluation: Combined exposures to polychlorophenols or to their sodium salts are possibly carcinogenic to humans (Group 2B). /Polychlorophenols and their sodium salts/

Carcinogen Classification:

This section provides the International Agency for Research on Cancer (IARC) Carcinogenic Classification and related monograph links. In the IARC Carcinogenic classification, chemicals are categorized into four groups: Group 1 (carcinogenic to humans), Group 2A (probably carcinogenic to humans), Group 2B (possibly carcinogenic to humans), and Group 3 (not classifiable as to its carcinogenicity to humans).

>> 2B, possibly carcinogenic to humans. (L135)

Health Effects:

>> Dermally absorbed doses of chlorophenols are potentially more toxic than orally absorbed doses. Within 20 minutes of being accidentally splashed with 2,4-DCP on his right arm and leg, a worker experienced seizures, collapsed, and died shortly thereafter. Lethargy, tremors, convulsions, and/or central nervous system depression have been reported in chlorophenol-exposed animals. (L159)

Exposure Routes:

>> The substance can be absorbed into the body by inhalation, through the skin and by ingestion. Serious local effects by all routes of exposure.

>> Oral (L159) ; dermal (L159)

Inhalation Exposure

>> Sore throat. Cough. Burning sensation behind the breastbone. Shortness of breath. Laboured breathing. Further see Ingestion.

Skin Exposure

>> MAY BE ABSORBED! Redness. Pain. Blisters. Further see Inhalation.

Eye Exposure

>> Redness. Pain. Severe burns.

Ingestion Exposure

>> Burns in mouth and throat. Abdominal pain. Tremor. Convulsions. Shock or collapse.

Target Organs:

Organs that are affected by exposure to this chemical. Information in this section reflects human data unless otherwise noted.

>> Immune

Adverse Effects:

An adverse effect is an undesired harmful effect resulting from a medical treatment or other intervention.

- >> Occupational hepatotoxin – Secondary hepatotoxins: the potential for toxic effect in the occupational setting is based on cases of poisoning by human ingestion or animal experimentation.
- >> Nephrotoxin – The chemical is potentially toxic to the kidneys in the occupational setting.
- >> Other Poison – Uncoupler
- >> Dermatotoxin – Skin burns.
- >> Toxic Pneumonitis – Inflammation of the lungs induced by inhalation of metal fumes or toxic gases and vapors.
- >> IARC Carcinogen – Class 3: Chemicals are not classifiable by the International Agency for Research on Cancer.

Interactions:

- >> ... Topical application of 0.3% dimethylbenzanthracene in benzene as an initiator & 20% (312 mg/kg) 2,4-dichlorophenol for 39 wk promoted papillomas & carcinomas in mice.

Antidote and Emergency Treatment:

- >> Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. /Phenols and related compounds/

Human Toxicity Excerpts:

- >> /SIGNS AND SYMPTOMS/ SYMPTOMATOLOGY: Burning pain in mouth and throat. White necrotic lesions in mouth, esophagus and stomach. Abdominal pain, vomiting ... and bloody diarrhea. Pallor, sweating, weakness, headache, dizziness, tinnitus. Shock: Weak irregular pulse, hypotension, shallow respirations, cyanosis, pallor, and a profound fall in body temperature. Possibly fleeting excitement and confusion, followed by unconsciousness. ... Stentorous breathing, mucous rales, rhonchi, frothing at nose and mouth and other signs of pulmonary edema are sometimes seen. Characteristic odor of phenol on the breath. Scanty, dark-colored ... urine ... moderately severe renal insufficiency may appear. Methemoglobinemia, Heinz body hemolytic anemia and hyperbilirubinemia have been reported. ... Death from respiratory, circulatory or cardiac failure. If spilled on skin, pain is followed promptly by numbness. The skin becomes blanched, and a dry opaque eschar forms over the burn. When the eschar sloughs off, a brown stain remains. /Phenol/

Non-Human Toxicity Excerpts:

- >> /LABORATORY ANIMALS: Acute Exposure/ In rats oral, subcutaneous, and intraperitoneal lethal doses of the chlorophenols produce similar signs of poisoning. Oral administration, however, results in fatal poisoning in smaller dosage and in a shorter period of time than sc administration. Restlessness and an increased rate of respiration appear a few minutes after administration of o- and m-chlorophenols and are followed a few minutes later by a rapidly developing motor weakness. Tremors, clonic convulsions (which can be induced by noise or touch), dyspnea and coma set in promptly & continue until death. Similar signs are produced by p-chlorophenol, but the convulsions are more severe. 2,4- & 2,6-dichlorophenols & 2,4,6- & 2,4,5-trichlorophenols produce these signs also, but decreased activity & motor weakness do not appear quite so promptly. The tremors are much less severe, but in this case, also, they continue until a few minutes before death. /Chlorophenols/

Non-Human Toxicity Values:

- >> LD50 Rat oral 580 mg/kg

National Toxicology Program Studies:

Reports from the National Toxicology Program, an interagency program supported by three government agencies (NIH, FDA, and CDC) within the Department of Health and Human Services. This program plays a critical role in generating, interpreting, and sharing toxicological information about chemicals of public health concerns.

- >> The mutagenic effect of 2,4-dichlorophenol in *S. typhimurium* strain TA1535 was considered to be equivocal only in the presence of hamster S9; 2,4-dichlorophenol produced no increases in revertant colonies in strains TA98, TA100, or TA1537 with or without exogenous metabolic activation. 2,4-Dichlorophenol increased trifluorothymidine (Tft) resistance in the mouse L5178Y assay without metabolic activation; it was not tested with activation. In cultured CHO cells, 2,4-

dichlorophenol did not induce chromosomal aberrations but did significantly increase the frequency of sister chromatid exchanges (SCEs) both in the presence and absence of S9.

12. Ecological Information

Resident Soil (mg/kg)

>> 1.90e+02

Industrial Soil (mg/kg)

>> 2.50e+03

Tapwater (ug/L)

>> 4.60e+01

MCL (ug/L)

>> 1.00e+02

Risk-based SSL (mg/kg)

>> 2.30e-02

Chronic Oral Reference Dose (mg/kg-day)

>> 3.00e-03

Volatile

>> Volatile

Mutagen

>> Mutagen

Fraction of Contaminant Absorbed in Gastrointestinal Tract

>> 1

Fraction of Contaminant Absorbed Dermal from Soil

>> 0.1

ICSC Environmental Data:

>> The substance is toxic to aquatic organisms. This substance does enter the environment under normal use. Great care, however, should be taken to avoid any additional release, for example through inappropriate disposal.

Sediment/Soil Concentrations:

Concentrations of this compound in sediment/soil.

>> SEDIMENT: The concentration of 2,4-dichlorophenol in river sediments above and below the effluent discharges of two New Zealand pulp and paper mills on the Tarawera River was determined to range from 0.4 to 1.3 ng/g(1). 2,4-Dichlorophenol (plus 2,5-dichlorophenol) levels of 1.17 mg/kg were detected in sediment samples taken from the Weser estuary in Germany on Aug 21, 1978(2). 2,4-Dichlorophenol concentration of 15-23 mg/kg (dry weight) were found in sediments of a Finnish lake receiving bleaching effluents from kraft pulp mills(3). Sediment samples collected from Lake Ketelmeer in the Netherlands during Mar 1979-Mar 1980 contained max and median concentrations of 10 and 4.4 ug/kg, respectively(4). The concentration of 2,4-dichlorophenol on suspended sediment collected from the effluent of kraft pulp mills in rivers of Alberta, Canada from summer 1990 to fall 1992 ranged from 0.005 to 1 ug/g(5). Sediment samples collected 1 km from the discharge of a kraft mill south of the city of Hudiksvall, Norway from 1985 to 1989 were found to contain 0.13 ug/g of 2,4-dichlorophenol(6).

Fish/Seafood Concentrations:

Concentrations of this compound in fish or seafood.

>> 2,4-Dichlorophenol was identified, but not quantified, in various fish collected from Lake Michigan and tributary streams during 1983(1). The concentration of 2,4-dichlorophenol in the bile of perch (*Perca fluviatilis*) collected from bleach pulp mill effluents from the Baltic Sea in 1984 and 1985 ranged from 240 to 7700 ng/g bile(2). The concentration of 2,4-dichlorophenol in fish collected upstream and downstream from a bleached kraft mill in the St. Maurice River, Quebec on August 14 and 18, 1989 ranged from 7 to 20 ug/L(3). The concentration of 2,4-dichlorophenol in the bile of goldfish

(Crassius auratus) collected from bleached kraft mill discharge from Lake Maraetai, New Zealand ranged from not detected to 2.65 ug/g bile (dry weight)(2). 2,4-Dichlorophenol levels ranging from 0.29 to 9.0 mg/kg were detected in seven species of fish (sturgeon, tomcod, shad, flounder, smelt, spiny dogfish, sea alewife) taken from the Saint John River-Harbor area during June-Aug 1977(4). The concentration of 2,4-dichlorophenol in fish collected from the effluent of bleached kraft pulp mills in rivers of Alberta, Canada from summer 1990 to fall 1992 ranged from 0.1 to 14.0 ug/g in mountain whitefish and longnose sucker(5).

Animal Concentrations:

Concentrations of this compound in animals.

- >> The combined concentration of 2,4- and 2,5-dichlorophenol detected in marine worms (*Lanice conchilega*) collected from the Weser River, Germany estuary bottom in 1977 was 11.8 ng/g wet weight(1).

13. Disposal Considerations

Spillage Disposal

- >> Personal protection: chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

Disposal Methods

- >> Generators of waste (equal to or greater than 100 kg/mo) containing this contaminant, EPA hazardous waste number U081, must conform with USEPA regulations in storage, transportation, treatment and disposal of waste.
- >> SRP: The most favorable course of action is to use an alternative chemical product with less inherent propensity for occupational exposure or environmental contamination. Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier. Ultimate disposal of the chemical must consider: the material's impact on air quality; potential migration in soil or water; effects on animal, aquatic, and plant life; and conformance with environmental and public health regulations.
- >> A potential candidate for rotary kiln incineration at a temperature range of 820 to 1,600 °C and residence times of seconds for liquids and gases, and hours for solids.
- >> The following wastewater treatment technologies have been investigated for 2,4-dichlorophenol: biological treatment, solvent extraction, and resin adsorption.
- >> Dissolve in a combustible solvent and incinerate in a furnace equipped with afterburner and scrubber. Recommendable method: Incineration. Not recommendable method: Discharge to sewer. Peer-review: Incinerate at high temp. PCDDs may be formed. (Peer-review conclusions of an IRPTC expert consultation (May 1985))

14. Transport Information

DOT

2,4-Dichlorophenol
6.1
UN Pack Group: III
Reportable Quantity of 100 lb or 45

IATA

2,4-Dichlorophenol
6.1,
UN Pack Group: III

15. Regulatory Information

Federal Drinking Water Guidelines:

Federal drinking water guidelines (e.g. maximum containment level (MCL)) for this chemical. In general, these guidelines are recommendations and not legally enforceable.

>> EPA 20 ug/l

Clean Water Act Requirements:

The Clean Water Act (CWA) of 1972 establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under CWA, the U.S. Environmental Protection Agency (EPA) developed the Toxic Pollutant List (40 CFR Part 401.15) and the Priority Pollutant List (40 CFR Part 423, Appendix A). These lists are to be used by EPA and States to develop the Effluent Guidelines regulations and ensure water quality criteria and standards.

>> Toxic pollutant designated pursuant to section 307(a)(1) of the Federal Water Pollution Control Act and is subject to effluent limitations.

Regulatory Information

The Australian Inventory of Industrial Chemicals

>> Chemical: Phenol, 2,4-dichloro-

REACH Registered Substance

>> Status: Active Update: 24-04-2012 <https://echa.europa.eu/registration-dossier/-/registered-dossier/2179>

New Zealand EPA Inventory of Chemical Status

>> 2,4-Dichlorophenol: Does not have an individual approval but may be used under an appropriate group standard

16. Other Information

Toxic Combustion Products:

Toxic products (e.g., gases and vapors) produced from the combustion of this chemical.

>> When heated to decomposition, or on contact with acid or acid fumes, it emits highly toxic fumes of chlorides.

Other Safety Information

Chemical Assessment

>> Evaluation – Phenol, 2,4-dichloro-

"The information provided is believed to be accurate but is not comprehensive and should be used as a reference. It reflects our current knowledge and is intended for safety guidance related to the product. This document does not constitute a warranty of the product's properties. Ionz is not responsible for any damages resulting from handling or contact with the product incorrectly."