

Issue Date 23-Apr-2015

Revision Date 09-Sep-2015

Version 3

1. IDENTIFICATION

Product identifier

Product Name o-Cresol/o-Dichlorobenzene 90/10%

Other means of identification

Product Code 4925

UN/ID no. UN2927

Synonyms For ortho-Cresol: o-Cresol; 2-Methylphenol; For ortho-Dichlorobenzene: 1,2-dichlorobenzene; o-Dichlorobenzene; DCB

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Harrell Industries, Inc.
2495 Commerce Drive
Rock Hill, SC 29730

www.harrellindustries.com

Emergency telephone number

Company Phone Number 803-327-6335

Fax Number 803-327-7808

24 Hour Emergency Phone Number 800 633-8253 (PERS)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Toxic if swallowed
Toxic in contact with skin
Fatal if inhaled
Causes severe skin burns and eye damage



For ortho-cresol: Combustible liquid and vapor; Can burn in a fire creating dense smoke. Corrosive chemical, causes burns to skin and eyes. Severe skin, eye and mucous membrane irritant, toxic chemical. Harmful if swallowed, inhaled, or absorbed. Do not breathe vapors. Do not get in eyes, on skin, or on clothing., Keep container closed. Use adequate ventilation. Wash hands thoroughly after handling. For ortho-Dichlorobenzene: DANGER! ASPIRATION MAY CAUSE LUNG DAMAGE. VAPORS CAUSE IRRITATION TO EYES AND RESPIRATORY TRACT. LIQUID CAUSES SKIN IRRITATION AND SEVERE EYE IRRITATION. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. AFFECTS LIVER, KIDNEYS AND BLOOD. COMBUSTIBLE LIQUID AND VAPOR. POSSIBLE CANCER HAZARD.MAY CONTAIN P-DICHLOROBENZENE WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA.

Appearance Clear, colorless to yellow liquid

Physical state liquid

Odor Characteristic, ethereal and phenol-like

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
 Do not breathe dust
 Use only outdoors or in a well-ventilated area
 Wear respiratory protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 Eye Contact (for ortho-Cresol): Vapors cause pain and irritation to eyes. Splashes may cause severe irritation and possible eye damage. Eye Contact (for ortho-Dichlorobenzene): Vapors cause irritation, redness, and pain. Contact with liquid may cause burning of the eyes and tissue damage.
 Skin Contact (for ortho-Cresol): Causes skin irritation resulting in redness and pain. Removes natural oils. May be absorbed through the skin. Skin Contact (for ortho-Dichlorobenzene): Skin contact causes irritations and possibly burns if contact is repeated or prolonged. May be absorbed through the skin.
 Inhalation (for ortho-Cresol): Acts as a relatively potent anesthetic. Irritates respiratory tract and causes central nervous system effects, including headache, drowsiness, and dizziness. Exposure to higher concentrations may result in unconsciousness and even death. May cause liver injury and blood disorders. Prolonged exposure may lead to death due to irregular heartbeat and kidney and liver disorders. Inhalation (for ortho-Dichlorobenzene): Causes irritation to the respiratory tract. Can cause headache, nausea, swelling around the eyes, runny nose, loss of appetite and weight loss. Higher concentrations may cause drowsiness, central nervous system depression, kidney and liver damage, unconsciousness, and death.
 Ingestion (for ortho-Cresol): Causes severe pain in the mouth and throat. Ingestion leads to burning pain in the mouth and abdominal pain, vomiting, and bloody diarrhea. Victim may go into shock. Possible delirium followed by unconsciousness. If death does not result, kidney damage may occur. Large quantities may cause symptoms similar to inhalation. Ingestion (for ortho-Dichlorobenzene): Toxic! A liver and kidney poison. May cause systemic poisoning with/symptoms paralleling inhalation. May be an aspiration hazard if swallowed.

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Synonyms

For ortho-Cresol: o-Cresol; 2-Methylphenol; For ortho-Dichlorobenzene: 1,2-dichlorobenzene; o-Dichlorobenzene; DCB.

Formula

Not applicable to mixtures

Chemical Name	CAS No.	Weight-%
o-Cresol	95-48-7	90
o-Dichlorobenzene	95-50-1	10

4. FIRST AID MEASURES

Description of first aid measures
Eye contact

Eye Contact (for ortho-Cresol): Vapors cause pain and irritation to eyes. Splashes may cause severe irritation and possible eye damage. Eye Contact (for ortho-Dichlorobenzene): Vapors cause irritation, redness, and pain. Contact with liquid may cause burning of the eyes and tissue damage.

Skin contact

Skin Contact (for ortho-Cresol): Causes skin irritation resulting in redness and pain. Removes natural oils. May be absorbed through the skin. Skin Contact (for ortho-Dichlorobenzene): Skin contact causes irritations and possibly burns if contact is repeated or prolonged. May be absorbed through the skin.

Inhalation

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

For o-Cresol: Poison! DO NOT INDUCE VOMITING! Give glasses of water as directed by emergency medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately. For ortho-Dichlorobenzene: Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms and effects, both acute and delayed
Symptoms

Chronic Exposure (for ortho-Cresol): Chronic overexposure may cause central nervous system depression and liver, kidney, pancreas, lung, and/or spleen damage. Chronic Exposure (for ortho-Dichlorobenzene): Chronic exposure may damage blood, liver and kidneys. o-Dichlorobenzene is a possible carcinogen. Prolonged or repeated skin exposure may cause dermatitis and blisters. Prolonged or repeated exposure through any route may cause symptoms paralleling acute inhalation.

Indication of any immediate medical attention and special treatment needed
Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray. Dry chemical. Alcohol foam. Carbon dioxide (CO₂). Water spray may be used to keep fire exposed containers cool.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

o-Cresol: Toxic gases and vapors such as hydrogen chloride, chlorine, phosgene, and carbon monoxide may be released upon heating to decomposition. Also, intense black smoke and heat as well as hydrocarbon fragments may result during the combustion of this material. For ortho-Dichlorobenzene: Combustion by-products include phosgene and hydrogen chloride gases.

Explosion data**Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.**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 Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb and place into a chemical waste container.

Methods for cleaning up Use non-sparking tools and equipment. Collect material in appropriate container or absorb with an inert material. Absorb with inert materials (e.g., vermiculite, dry sand, earth). Do not use combustible materials, such as saw dust. Do not flush to sewer!!.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Keep in a tightly closed container, stored in a cool, dry, ventilated area away from sources of heat, moisture, and incompatibles. Protect against physical damage. Isolate from any source of heat or ignition. Store out of direct sunlight. Employ bonding, grounding, venting, and explosion relief provisions in accord with accepted engineering practices. Outside or detached storage is recommended. Wear special personal protective equipment for maintenance break-ins or wherever exposures may exceed established levels. Wash hands, face, forearms, and neck when exiting restricted areas. Containers of this material may be hazardous when empty since they retain product residue. Observe all warnings and precautions listed for the product. Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day. Avoid cross-contamination of street clothes. Wash hands before eating and do not eat, drink, or smoke in workplace. Odor threshold (o-Cresol): 250 mg/m³. The odor threshold only serves as a warning of exposure; not smelling it does not mean you are not being exposed.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials For o-Cresol: Strong caustics and chemically active metals such as aluminum, magnesium powder, sodium, or potassium; acetone, fluorine, methanol, sodium methoxide and dinitrogen tetroxide, tert-butoxide, triisopropylphosphine. Strong oxidizing agents and halogens. Corrosive to any metal, including aluminum, lead, magnesium, and zinc. For o-Dichlorobenzene: Strong oxidizers, aluminum or aluminum alloys.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
o-Cresol 95-48-7	TWA: 20 mg/m ³ inhalable fraction and vapor S*	-	IDLH: 250 ppm TWA: 2.3 ppm TWA: 10 mg/m ³
o-Dichlorobenzene 95-50-1	STEL: 50 ppm TWA: 25 ppm	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 300 mg/m ³ Ceiling: 50 ppm Ceiling: 300 mg/m ³	IDLH: 200 ppm Ceiling: 50 ppm Ceiling: 300 mg/m ³

Appropriate engineering controls**Engineering Controls**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Use chemical safety goggles and/or full face shield. Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene is a recommended material for personal protective equipment. Natural rubber and polyvinyl chloride ARE NOT recommended materials for personal protective equipment. Note: Breakthrough time for neoprene is less than 5 minutes; change gloves frequently or consult with reputable glove supplier to select a glove with longer breakthrough time.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	Characteristic, ethereal and phenol-like
Appearance	Clear, colorless to yellow liquid	Odor threshold	250 m/mg3
Color	Clear, colorless to yellowish	Remarks • Method	
Property	Values		
pH	No information available		
Melting point / freezing point	No information available		
Boiling point / boiling range	No information available		
Flash point	o-Dichlorobenzene: 66 °C / o-Dichlorobenzene: 157 °F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Relative density	No information available		
Water solubility	No information available		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	o-Dichlorobenzene: 648 °C / o-Dichlorobenzene: 1198 °F		
Decomposition temperature	No information available		

Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Will not occur.

Conditions to avoid

Heat, flames, ignition sources and incompatibles.

Incompatible materials

For o-Cresol: Strong caustics and chemically active metals such as aluminum, magnesium powder, sodium, or potassium; acetone, fluorine, methanol, sodium methoxide and dinitrogen tetroxide, tert-butoxide, triisopropylphosphine. Strong oxidizing agents and halogens. Corrosive to any metal, including aluminum, lead, magnesium, and zinc. For o-Dichlorobenzene: Strong oxidizers, aluminum or aluminum alloys.

Hazardous Decomposition Products

o-Cresol: hydrogen chloride, chlorine, phosgene, and carbon monoxide may be released upon heating to decomposition.

o-Dichlorobenzene: may emit oxides of carbon and hydrogen chloride gas when heated to decomposition. May produce carbon monoxide, carbon dioxide, hydrogen chloride and phosgene when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Inhalation (for ortho-Cresol): Acts as a relatively potent anesthetic. Irritates respiratory tract and causes central nervous system effects, including headache, drowsiness, and dizziness. Exposure to higher concentrations may result in unconsciousness and even death. May cause liver injury and blood disorders. Prolonged exposure may lead to death due to irregular heartbeat and kidney and liver disorders. Inhalation (for ortho-Dichlorobenzene): Causes irritation to the respiratory tract. Can cause headache, nausea, swelling around the eyes, runny nose, loss of appetite and weight loss. Higher concentrations may cause drowsiness, central nervous system depression, kidney and liver damage, unconsciousness, and death.
Eye contact	Eye Contact (for ortho-Cresol): Vapors cause pain and irritation to eyes. Splashes may cause severe irritation and possible eye damage. Eye Contact (for ortho-Dichlorobenzene): Vapors cause irritation, redness, and pain. Contact with liquid may cause burning of the eyes and tissue damage.
Skin contact	Skin Contact (for ortho-Cresol): Causes skin irritation resulting in redness and pain. Removes natural oils. May be absorbed through the skin. Skin Contact (for ortho-Dichlorobenzene): Skin contact causes irritations and possibly burns if contact is repeated or prolonged. May be absorbed through the skin.
Ingestion	Ingestion (for ortho-Cresol): Causes severe pain in the mouth and throat. Ingestion leads to burning pain in the mouth and abdominal pain, vomiting, and bloody diarrhea. Victim

may go into shock. Possible delirium followed by unconsciousness. If death does not result, kidney damage may occur. Large quantities may cause symptoms similar to inhalation. Ingestion (for ortho-Dichlorobenzene): Toxic! A liver and kidney poison. May cause systemic poisoning with/symptoms paralleling inhalation. May be an aspiration hazard if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
o-Cresol 95-48-7	= 121 mg/kg (Rat)	= 890 mg/kg (Rabbit)	> 1220 mg/m ³ (Rat) 1 h
o-Dichlorobenzene 95-50-1	= 1516 mg/kg (Rat)	> 10 g/kg (Rabbit)	= 8.15 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms

For o-Cresol: Acute Effects: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation, and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Can cause Central Nervous System depression. Exposure can cause: vomiting, diarrhea, headache, and gastrointestinal disturbances. Causes burns. Toxic if absorbed through skin. Readily absorbed through the skin. May be fatal if inhaled. Toxic if swallowed.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
o-Dichlorobenzene 95-50-1	-	Group 3	-	-

Target Organ Effects liver, kidney, Pancreas, Cardiovascular system, Central nervous system, lungs, spleen.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material may leach into groundwater. When released into the soil, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. Although this material has a relatively short half-life in water, it can also readily be adsorbed to sediment and persist for decades. When released into water, this material is expected to have a half-life between 10 and 30 days. This material has an experimentally-determined bioconcentration factor (BCF) of greater than 100. This material may bioaccumulate to some extent. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into air, this material is expected to have a half-life between 10 and 30 days.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
o-Cresol 95-48-7	65: 96 h Pseudokirchneriella subcapitata mg/L EC50	9.72 - 15.92: 96 h Pimephales promelas mg/L LC50 flow-through 24: 96 h Brachydanio rerio mg/L LC50 11.5: 96 h Lepomis macrochirus mg/L LC50 18.37 - 24.21: 96 h Lepomis macrochirus mg/L LC50 static 8.4: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.07 - 23.61: 96 h Poecilia reticulata mg/L LC50 static	9.5: 48 h Daphnia magna mg/L EC50 15.8: 48 h Daphnia magna mg/L EC50 Static
o-Dichlorobenzene 95-50-1	91.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.2: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 61.2 - 181: 72 h	8.23 - 10.9: 96 h Pimephales promelas mg/L LC50 flow-through 5.8: 96 h Pimephales promelas mg/L LC50 static 42.6 - 80.4: 96 h	1.7: 24 h Daphnia magna mg/L EC50 0.74: 48 h Daphnia magna mg/L EC50 Static

	Pseudokirchneriella subcapitata mg/L EC50	Pimephales promelas mg/L LC50 static 5.2: 96 h Brachydanio rerio mg/L LC50 flow-through 4.8 - 6.6: 96 h Lepomis macrochirus mg/L LC50 static 1.44 - 1.73: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	
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Persistence and degradability**Bioaccumulation**

Chemical Name	Partition coefficient
o-Cresol 95-48-7	1.95
o-Dichlorobenzene 95-50-1	3.43

Other adverse effects 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. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.

Contaminated packaging Do not reuse container.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
o-Cresol 95-48-7	-	Included in waste stream: F039 Included in waste stream: K060	200.0 mg/L regulatory level	-
o-Dichlorobenzene 95-50-1	U070	Included in waste streams: F002, F039, K042	-	U070

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
o-Dichlorobenzene 95-50-1	Category II - Semi-volatiles	-	-	-

14. TRANSPORT INFORMATION

DOT Not regulated
UN/ID no. UN2927
Proper shipping name Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class 6.1
Subsidiary class (8),
Packing Group II
Reportable Quantity (RQ) 100 lbs (45.4 kg)

TDG Regulated
UN/ID no. UN2927
Proper shipping name Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class 6.1
Subsidiary class (8),
Packing Group II

MEX Regulated

UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Subsidiary class	(8),
Packing Group	II
ICAO (air)	Regulated
UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Subsidiary hazard class	(8),
Packing Group	II
IATA	Regulated
UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Subsidiary hazard class	(8),
Packing Group	II
IMDG	Regulated
UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Subsidiary hazard class	(8),
Packing Group	II
RID	Regulated
UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Packing Group	II
ADR	Regulated
UN/ID no.	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Packing Group	II
ADN	Regulated
UN Number	UN2927
Proper shipping name	Toxic Liquids, Corrosive, Organic, N.O.S., (o-Cresol/O-Dichlorobenzene 95/5%)
Hazard Class	6.1
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
o-Cresol - 95-48-7	1.0
o-Dichlorobenzene - 95-50-1	1.0

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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
o-Cresol 95-48-7	-	-	-	X
o-Dichlorobenzene 95-50-1	-	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
o-Cresol 95-48-7	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
o-Dichlorobenzene 95-50-1	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
o-Cresol 95-48-7	X	X	X
o-Dichlorobenzene 95-50-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 3	Flammability 2	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 3	Flammability 2	Physical hazards 0	Personal protection X

Issue Date 23-Apr-2015

Revision Date 09-Sep-2015

Revision Note

No information available

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, 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