

SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
JIS Z 7252:2019, JIS Z 7253: 2019

Issuing Date 12-Dec-2022

Revision Date 12-Dec-2022

Revision Number 1

1. Identification

Product Name Copaltite

Registration Number(s) No information available

Details of the supplier of the safety data sheet

Supplier

National Engineering Products, Inc.
1950 Capitol Avenue, N.E.
Washington, DC 20002
Phone: (301) 656-1688
Website: www.nationalengineeringproducts.com

Emergency telephone number +1-301-656-1688 (Monday-Friday 9AM to 4PM EST)

E-mail address nepi.customerservice@gmail.com

Recommended use of the chemical and restrictions on use

Recommended use High temperature sealing compound

Restrictions on use None known

2. Hazard(s) identification

GHS Classification

Flammable liquids	Category 4
Aspiration hazard	Classification not possible
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Classification not possible
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1 Category 3
Category 1	blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system.
Category 2	visual organs, Systemic Toxicity, Nervous System.
Category 3	Target organ effects: Narcotic effects.
Specific target organ toxicity (repeated exposure)	Category 1
Category 1	blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system.
Category 2	visual organs.
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
Ozone	Classification not possible

Label elements**Signal word**

Danger

Hazard statements

- Harmful if swallowed
- Toxic in contact with skin
- Toxic if inhaled
- Causes severe skin burns and eye damage
- May cause an allergic skin reaction
- Suspected of causing genetic defects
- May cause cancer
- May damage fertility or the unborn child
- Causes damage to organs
- May cause respiratory irritation
- May cause drowsiness or dizziness
- Causes damage to organs through prolonged or repeated exposure
- Very toxic to aquatic life with long lasting effects
- Combustible liquid
 - Causes damage to the following organs: blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system.
 - May cause damage to the following organs: visual organs, Systemic Toxicity, Nervous System.
 - Causes damage to the following organs through prolonged or repeated exposure: blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system.
 - May cause damage to the following organs through prolonged or repeated exposure: visual organs.

Precautionary statements**Prevention**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/clothing and eye/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Contaminated work clothing should not be allowed out of the workplace
- Avoid release to the environment
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Response

- Immediately call a doctor
- Specific treatment (see supplemental first aid instructions on this label)
- 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
- Immediately call a doctor
- IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
- Rinse mouth
- Do NOT induce vomiting
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
- Wash contaminated clothing before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Immediately call a doctor
- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
- Collect spillage

Storage

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

Disposal

- Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards

- Risk of blindness after swallowing the product

3. Composition/information on ingredients**Pure substance/mixture**

Mixture

Chemical name	CAS No	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No
Mixed cresols	1319-77-3	10-30	Existing	(3)-499,(4)-57	Existing	(4)-57,(3)-499
Methyl alcohol	67-56-1	5-10	Existing	(2)-201	Existing	(2)-201
Phenol	108-95-2	1-5	Existing	(3)-481	Existing	(3)-481
Formaldehyde	50-00-0	0.1-1	Existing	(2)-482	Existing	2-(8)-379
Quartz	14808-60-7	0.1-1	Existing	(1)-548	Existing	(1)-548
Nitrobenzene	98-95-3	0.0171	Existing	(3)-436	Existing	(3)-436
Aniline	62-53-3	0.0171	Existing	(3)-105	Existing	(3)-105

This product contains ≥ 0.1 - $< 1.0\%$ of substance(s) that are classified for Respiratory sensitization Category 1/1B.

Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)

The amount of the relevant substance in certain cases referenced in article 4(i)(a) or 4(i)(b) of the Enforcement Order of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) is calculated based on the conversion factors shown (with safety factor = 1 in cases where conversion factor information is not available)

Chemical name	Cabinet order name	Metal, CN, F, etc	Conversion coefficient	Content rate %	Category	Ordinance number	Control number
*	Cresol			25	Class I designated chemical substance	1-86	86
Phenol	Phenol			2.8	Class I designated chemical substance	1-349	349
Formaldehyde	Formaldehyde			0.94	Specific class I designated chemical substance	1-411	411

* Refer to Cabinet order name

After April 1, 2023 Pollutant Release and Transfer Register (PRTR)

The amount of the relevant substance in certain cases referenced in article 4(i)(a) or 4(i)(b) of the Enforcement Order of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) is calculated based on the conversion factors shown (with safety factor = 1 in cases where conversion factor information is not available)

Chemical name	Cabinet order name	Metal, CN, F, etc	Conversion coefficient	Content rate %	Category	Ordinance number	Control number
*	Cresol			25	Class I designated chemical substance	1-110	86
Phenol	Phenol			2.8	Class I designated chemical substance	1-391	349
Formaldehyde	Formaldehyde			0.94	Specific class I designated	1-464	411

					chemical substance		
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* Refer to Cabinet order name

Industrial Safety and Health Law

ISHL Notifiable Substances

Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Chemical name	CAS No	Category	Ordinance number	Content rate %
Mixed cresols	1319-77-3	ISHL Notifiable Substances	9-141	20 - 30
Methyl alcohol	67-56-1	ISHL Notifiable Substances		<10
Phenol	108-95-2	ISHL Notifiable Substances	9-474	<10
Formaldehyde	50-00-0	ISHL Notifiable Substances	Attached table 9-548	<10
Quartz	14808-60-7	ISHL Notifiable Substances	9-165-2	<10

Harmful Substances Whose Names Are to be Indicated on the Label

Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Chemical name	CAS No	Category	Ordinance number	Content rate %
Mixed cresols	1319-77-3	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	20 - 30
Methyl alcohol	67-56-1	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10
Phenol	108-95-2	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10
Formaldehyde	50-00-0	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10
Quartz	14808-60-7	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10
Nitrobenzene	98-95-3	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10
Aniline	62-53-3	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table	<10

Poisonous and Deleterious Substances Control Law

Deleterious

Chemical name	CAS No	Category	Content rate %
Mixed cresols	1319-77-3	Deleterious substances (law art.2, attached table 2, designating order art.2)	25

4. First-aid measures

General advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.

In case of inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention. Immediate medical attention is required.

In case of skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention. May cause an allergic skin reaction.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.
In case of ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Most important symptoms/effects, acute and delayed	Burning. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing. May cause blindness.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not breathe vapor or mist. Use personal protective equipment as required. See section 8 for more information.
Note to physicians	Contains methanol, there is a need for rapid treatment of any ingestion exposure. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.
Explosive properties	Not an explosive.
Special Extinguishing Media	None known based on information supplied.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Attention! Corrosive material. Keep people away from and upwind of spill/leak. Do not breathe vapor or mist.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
Other information	Refer to protective measures listed in Sections 7 and 8.

7. Handling and storage

Handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

Hygiene Measures Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist.

Storage

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.

8. Exposure controls/personal protection

Engineering controls Showers
Eyewash stations
Ventilation systems.

Exposure guidelines

Chemical name	Japan Society of Occupational Health	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Mixed cresols 1319-77-3	TWA: 5 ppm TWA: 22 mg/m ³ S*	5 ppm	TWA: 20 mg/m ³ inhalable fraction and vapor S*
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ S*	200 ppm	STEL: 250 ppm TWA: 200 ppm S*
Phenol 108-95-2	TWA: 5 ppm TWA: 19 mg/m ³ S*	-	TWA: 5 ppm S*
Formaldehyde	Ceiling: 0.2 ppm	0.1 ppm	dermal sensitizer;respiratory

50-00-0	Ceiling: 0.24 mg/m ³ TWA: 0.1 ppm TWA: 0.12 mg/m ³		sensitizer STEL: 0.3 ppm TWA: 0.1 ppm
Quartz 14808-60-7	TWA: 0.03 mg/m ³	-	TWA: 0.025 mg/m ³ respirable particulate matter
Nitrobenzene 98-95-3	TWA: 1 ppm TWA: 5 mg/m ³ S*	-	TWA: 1 ppm S*
Aniline 62-53-3	TWA: 1 ppm TWA: 3.8 mg/m ³ S*	-	TWA: 2 ppm S*

Biological occupational exposure limits

Chemical name	Japan Society of Occupational Health	ACGIH
Methyl alcohol 67-56-1	20 mg/L - urine (Methanol) - end of shift	15 mg/L - urine (Methanol) - end of shift
Phenol 108-95-2	250 mg/g creatine - urine (Phenol) - end of shift	250 mg/g creatinine - urine (Phenol with hydrolysis) - end of shift
Nitrobenzene 98-95-3	-	1.5 % of hemoglobin - blood (Methemoglobin) - during or end of shift
Aniline 62-53-3	-	0.5 mg/L - urine (Aniline with hydrolysis) - end of shift

Environmental exposure controls Avoid release to the environment. Do not allow into any sewer, on the ground or into any body of water.

Personal protective equipment

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

9. Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical state	Liquid
Color	Red, black
Odor	Slight. Methanol-like odor.
Odor threshold	No information available

Property

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Initial boiling point and boiling range	80 - 80 °C / 176 - 176 °F	@ 760 mmHg
Flammability		No data available
Upper/lower flammability or explosive limits		No data available
Upper flammability or explosive limits	36	
Lower flammability or explosive limits	6.7	
Flash point	87.8 - 93.3 °C / 190 - 199.9 °F	TOC

Evaporation rate	7	Butyl acetate = 1
Autoignition temperature	423.89	No data available
Decomposition temperature		No data available
pH		No data available
Viscosity		
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	100%	
Solubility(ies)		No data available
Partition Coefficient (n-octanol/water)		No data available
Vapor pressure	52 mmHg	@ 25 °C
Density and/or relative density		
Relative density	1.135 - 1.165	@20°C
Liquid Density		No data available
Bulk density		No data available
Vapor density	1.1	(air = 1)
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable

Other information

Explosive properties	Not an explosive
Oxidizing properties	Not an oxidizer

10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	May polymerize when heated.
Conditions to avoid	Containers may rupture or explode if exposed to heat. Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Alkali metals. Halocarbons. Acyl halides. Acids. Bases. Oxidizing agent.
Hazardous decomposition products	Carbon oxides. Aldehydes. Organic compounds. Sulfur oxides. Barium oxides. Cresol vapors.
Explosion data	
Sensitivity to static discharge	Yes.
Sensitivity to mechanical impact	None.

11. Toxicological information**Acute toxicity****Numerical measures of toxicity - Product Information**

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

ATEmix (oral)	1,047.50 mg/kg
ATEmix (dermal)	499.50 mg/kg
ATEmix (inhalation-dust/mist)	0.609 mg/l

Unknown acute toxicity

56 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

56 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

85 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Mixed cresols	= 1454 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	-
Methyl alcohol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
Phenol	= 340 mg/kg (Rat)	= 630 mg/kg (Rabbit)	-
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h
Nitrobenzene	= 349 mg/kg (Rat)	= 760 mg/kg (Rabbit)	= 2.847 mg/L (Rat) 4 h
Aniline	= 440 mg/kg (Rat)	= 442 mg/kg (Rat)	= 1 mg/L (Rat) 4 h = 1.82 mg/L (Rat) 4 h

Abbreviations and acronyms

Rat: Rat

Rabbit: Rabbit

Symptoms

Burning. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing. Blindness.

Product Information**Ingestion**

Harmful if swallowed. Causes burns. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.

Inhalation

Toxic if inhaled. Corrosive by inhalation. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Skin contact

Toxic in contact with skin. Causes burns. May cause sensitization by skin contact.

Eye contact

Causes serious eye damage. May cause irreversible damage to eyes.

Skin corrosion/irritation

Classification based on data available for ingredients. Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.

Carcinogenicity

Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

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

Chemical name	Japan	IARC
Mixed cresols 1319-77-3	2	-
Phenol 108-95-2		Group 3
Formaldehyde 50-00-0	1A	Group 1

Quartz 14808-60-7	1A	Group 1
Nitrobenzene 98-95-3	2	Group 2B
Aniline 62-53-3	1B	Group 2A

Legend**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

Target organ effects Central nervous system. Eyes. Nervous System. Optic nerve. Gastrointestinal tract (GI). Heart. Kidney. Liver. Lungs. Respiratory system. Skin.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin. May cause respiratory irritation. May cause drowsiness or dizziness.

blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system. visual organs, Systemic Toxicity, Nervous System.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

blood system, Cardiovascular system, Central nervous system, Kidneys, Liver, Respiratory system. visual organs.

Aspiration hazard Based on available data, the classification criteria are not met. Classification not possible.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Percentage for unknown hazards 56.3784 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Mixed cresols - 1319-77-3	-	LC50: =12.8mg/L (96h, Pimephales promelas) LC50: =10mg/L (96h, Lepomis macrochirus)	-
Methyl alcohol - 67-56-1	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-
Phenol - 108-95-2	EC50: =46.42mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.0188 - 0.1044mg/L	LC50: 11.9 - 50.5mg/L (96h, Pimephales promelas) LC50: 20.5 - 25.6mg/L (96h, Pimephales promelas)	EC50: 4.24 - 10.7mg/L (48h, Daphnia magna) EC50: 10.2 - 15.5mg/L (48h, Daphnia magna)

	(96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 187 - 279mg/L (72h, <i>Desmodesmus subspicatus</i>)	LC50: =32mg/L (96h, <i>Pimephales promelas</i>) LC50: 5.449 - 6.789mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 7.5 - 14mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 4.23 - 7.49mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 5.0 - 12.0mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =13.5mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 11.9 - 25.3mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =11.5mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 34.09 - 47.64mg/L (96h, <i>Poecilia reticulata</i>) LC50: =31mg/L (96h, <i>Poecilia reticulata</i>) LC50: =27.8mg/L (96h, <i>Brachydanio rerio</i>) LC50: =0.00175mg/L (96h, <i>Cyprinus carpio</i>) LC50: 33.9 - 43.3mg/L (96h, <i>Oryzias latipes</i>) LC50: 23.4 - 36.6mg/L (96h, <i>Oryzias latipes</i>)	
Formaldehyde - 50-00-0	-	LC50: 22.6 - 25.7mg/L (96h, <i>Pimephales promelas</i>) LC50: =1510µg/L (96h, <i>Lepomis macrochirus</i>) LC50: =41mg/L (96h, <i>Brachydanio rerio</i>) LC50: 0.032 - 0.226mL/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 100 - 136mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 23.2 - 29.7mg/L (96h, <i>Pimephales promelas</i>)	EC50: 11.3 - 18mg/L (48h, <i>Daphnia magna</i>) LC50: =2mg/L (48h, <i>Daphnia magna</i>)
Nitrobenzene - 98-95-3	EC50: =44.1mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 3.45 - 38.13mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: 36 - 88.8mg/L (72h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 40.49 - 47.51mg/L (96h, <i>Pimephales promelas</i>) LC50: =92.2mg/L (96h, <i>Brachydanio rerio</i>) LC50: 36 - 49mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 121 - 150mg/L (96h, <i>Poecilia reticulata</i>)	EC50: =33mg/L (48h, <i>Daphnia magna</i>) EC50: 25.6 - 42mg/L (48h, <i>Daphnia magna</i>)
Aniline - 62-53-3	-	LC50: 68.4 - 83.4mg/L (96h, <i>Pimephales promelas</i>) LC50: 40.7 - 59.1mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 7.4 - 15.3mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 12.6 - 108mg/L (96h, <i>Oryzias latipes</i>) LC50: 101 - 131mg/L (96h, <i>Poecilia reticulata</i>)	-

Persistence and degradability

No information available.

Bioaccumulation**Component Information**

Chemical name	Partition coefficient
Mixed cresols 1319-77-3	2.33
Methyl alcohol 67-56-1	-0.77
Phenol 108-95-2	1.47
Formaldehyde 50-00-0	0.35
Nitrobenzene 98-95-3	1.86
Aniline 62-53-3	0.91

Mobility in soil No information available.

Hazardous to the ozone layer Based on available data, the classification criteria are not met. Classification not possible.

Other adverse effects No information available.

13. Disposal considerations

Waste from residues/unused products Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Do not reuse empty containers.

14. Transport information

Japan Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

IATA Not regulated

15. Regulatory information**National regulations**

Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)

Applies, See section 3 for more information

After April 1, 2023 Pollutant Release and Transfer Register (PRTR)

Applies, See section 3 for more information

Industrial Safety and Health Law**Harmful Substances Requiring Workers to Subject to Medical Exams**

Medical Examination - Industrial Safety and Health Law article 66, enforcement order article 22, and the Ordinance on Prevention of Hazards Due to Specified Chemical Substances, Table 5

Ordinance on Prevention of Organic Solvent Poisoning

Organic solvents class 2 - Industrial Safety and Health Law enforcement order Table 6-2 (related to article 6, article 21, article 22, and the Ordinance on Prevention of Organic Solvent Poisoning)

Harmful Substances Whose Names Are to be Indicated on the Label

Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

ISHL Notifiable Substances

Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

ISHL Working Environmental Evaluation Standards - Administrative Control Levels

Subject to working environment measurements (related to Industrial Safety and Health Law Enforcement Order article 21 and Working Environment Evaluation Standards - administrative control levels). For further specification, refer to section 8 of the SDS.

Strong mutagenic chemical substances

New chemical substances with mutagenicity recognized (Article 57-3, Paragraph 1 of the Industrial Safety and Health Law).

Corrosive liquid

Corrosive liquids identified in Article 326 of the Ordinance of the Industrial Safety and Health Law which requires an employer to take measures for facilities that use the liquids in pressurized power feeding and through hoses

Poisonous and Deleterious Substances Control Law

Deleterious substances - Poisonous and Deleterious Substance Control Law table 2 and Cabinet Order article 2

Fire Service Law:

Flammable liquids, group 4, 3rd class petroleums, water-insoluble, hazard rank III, 2000 liters

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

Chemical name	CAS No	Chemical Substances Control Law
Mixed cresols	1319-77-3	Priority assessment chemical substance
Phenol	108-95-2	Priority assessment chemical substance

Act on Prevention of Marine Pollution and Maritime Disaster

Not applicable

Labor Standards Act

Occupational illnesses caused by chemical substances - Labor Standards Act article 75, Enforcement Ordinance article 35 and Notification Designating Elements and Compounds of Chemical Substances and Occupational Illnesses Table 1-2 item 4-1

Water Pollution Control Act

Designated substance may cause adverse effects to human health or the living environment per Water Pollution Control Law article 2 and Enforcement Order article 3-3

Sewerage Act

Sewerage Act article 12-2 and Enforcement Order article 9-4

Waterworks (Water Supply) Act

Waterworks (Water Supply) Act article 4 legally binding water quality standards

Waterworks (Water Supply) Act - items that require further study

Air Pollution Control Law

Air pollutants with regulated emissions standards, Air Pollution Control Act article 3

Specified substances subject to measures in event of an accident per Air Pollution Control Law article 17, paragraph 1 and Enforcement Order article 10

Volatile organic compound per Air Pollution Control Law article 2, paragraph 4

Hazardous air pollutants (HAPs) per Air Pollution Control Law article 2, paragraph 1, item 3 and Enforcement Order article 1

International Regulations

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

16. Other information

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Revision Date	12-Dec-2022
Revision Note	Initial Release.

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	Ceiling	Maximum limit value
*	Skin designation	+	Sensitizers

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
European Chemicals Agency
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Disclaimer

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End of Safety Data Sheet