

1. Identification

Product identifier	Acids Mixture - CLP Semi	
Other means of identification		
Item	M-CLPSEM1AX4	
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Chem Service, Inc.	
Address	660 Tower Lane West Chester, PA 19380 United States	
Telephone	Toll Free	800-452-9994
	Direct	610-692-3026
Website	www.chemservice.com	
E-mail	info@chemservice.com	
Emergency phone number	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Acute toxicity, inhalation	Category 3
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 1
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

Response	If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Specific treatment (see this label). Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center/doctor. Take off contaminated clothing and wash before reuse. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	0.3% of the mixture consists of component(s) of unknown acute oral toxicity. 0.6% of the mixture consists of component(s) of unknown acute dermal toxicity. 98.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 98.4% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 98.4% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methylene chloride	DICHLOROMETHANE; METHYLENE DICHLORIDE	75-09-2	90 - 100
2,3,4,6-Tetrachlorophenol		58-90-2	0.1
2,4,5-Trichlorophenol		95-95-4	0.1
2,4,6-Trichlorophenol		88-06-2	0.1
2,4-Dichlorophenol		120-83-2	0.1
2,4-Dimethylphenol		105-67-9	0.1
2,4-Dinitrophenol (min 15wt% water)		51-28-5	0.1
2,6-Dichlorophenol		87-65-0	0.1
2-Chlorophenol		95-57-8	0.1
2-Methylphenol		95-48-7	0.1
2-Nitrophenol		88-75-5	0.1
4,6-Dinitro-o-cresol (contains ~10% water)		534-52-1	0.1
4-Chloro-3-methylphenol		59-50-7	0.1
4-Methylphenol		106-44-5	0.1
4-Nitrophenol		100-02-7	0.1
Benzoic acid		65-85-0	0.1
Pentachlorophenol		87-86-5	0.1
Phenol		108-95-2	0.1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion	Rinse mouth. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. May cause allergic respiratory reaction. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Avoid contact with clothing. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Methylene chloride (CAS 75-09-2)	STEL	125 ppm
	TWA	25 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-Methylphenol (CAS 95-48-7)	PEL	22 mg/m ³
		5 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	PEL	0.2 mg/m3
4-Methylphenol (CAS 106-44-5)	PEL	22 mg/m3
Pentachlorophenol (CAS 87-86-5)	PEL	5 ppm 0.5 mg/m3
Phenol (CAS 108-95-2)	PEL	19 mg/m3 5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-Methylphenol (CAS 95-48-7)	TWA	20 mg/m3	Inhalable fraction and vapor.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	TWA	0.2 mg/m3	
4-Methylphenol (CAS 106-44-5)	TWA	20 mg/m3	Inhalable fraction and vapor.
Methylene chloride (CAS 75-09-2)	TWA	50 ppm	
Pentachlorophenol (CAS 87-86-5)	TWA	0.5 mg/m3	
Phenol (CAS 108-95-2)	TWA	5 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-Methylphenol (CAS 95-48-7)	TWA	10 mg/m3
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	TWA	2.3 ppm 0.2 mg/m3
4-Methylphenol (CAS 106-44-5)	TWA	10 mg/m3
Pentachlorophenol (CAS 87-86-5)	TWA	2.3 ppm 0.5 mg/m3
Phenol (CAS 108-95-2)	Ceiling	60 mg/m3
	TWA	15.6 ppm 19 mg/m3 5 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
2,4-Dichlorophenol (CAS 120-83-2)	TWA	6.7 mg/m3
		1 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichloromethane	Urine	*
Pentachlorophenol (CAS 87-86-5)	2 mg/g	Total PCP	Creatinine in urine	*
	5 mg/l	Free PCP	Plasma	*
Phenol (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-Methylphenol (CAS 95-48-7)	Can be absorbed through the skin.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Can be absorbed through the skin.
4-Methylphenol (CAS 106-44-5)	Can be absorbed through the skin.
Pentachlorophenol (CAS 87-86-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Methylphenol (CAS 95-48-7)	Skin designation applies.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Skin designation applies.
4-Methylphenol (CAS 106-44-5)	Skin designation applies.
Phenol (CAS 108-95-2)	Skin designation applies.

US - Tennessee OELs: Skin designation

2-Methylphenol (CAS 95-48-7)	Can be absorbed through the skin.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Can be absorbed through the skin.
4-Methylphenol (CAS 106-44-5)	Can be absorbed through the skin.
Pentachlorophenol (CAS 87-86-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

2-Methylphenol (CAS 95-48-7)	Can be absorbed through the skin.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Can be absorbed through the skin.
4-Methylphenol (CAS 106-44-5)	Can be absorbed through the skin.
Pentachlorophenol (CAS 87-86-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Can be absorbed through the skin.
Pentachlorophenol (CAS 87-86-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

US WEEL Guides: Skin designation

2,4-Dichlorophenol (CAS 120-83-2)	Can be absorbed through the skin.
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-Methylphenol (CAS 95-48-7)	Can be absorbed through the skin.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Can be absorbed through the skin.
4-Methylphenol (CAS 106-44-5)	Can be absorbed through the skin.
Pentachlorophenol (CAS 87-86-5)	Can be absorbed through the skin.
Phenol (CAS 108-95-2)	Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear eye/face protection. Wear a full-face respirator, if needed.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection Wear positive pressure self-contained breathing apparatus (SCBA).

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid
Color	Not available.

Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-139 °F (-95 °C) estimated
Initial boiling point and boiling range	103.55 °F (39.75 °C) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	15.5 % estimated
Flammability limit - upper (%)	66.4 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	579.97 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	1033 °F (556.11 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.326594 g/cm3 estimated
Percent volatile	98.4 % estimated
Specific gravity	1.33 estimated
VOC (Weight %)	98.4 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Toxic gas.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed.
Inhalation	Toxic by inhalation. May cause damage to organs by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Skin irritation. May cause redness and pain. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Toxic by inhalation. Harmful if swallowed. Harmful in contact with skin. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Components	Species	Test Results
2,3,4,6-Tetrachlorophenol (CAS 58-90-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	250 mg/kg
<i>Oral</i>		
LD50	Gerbil	698 mg/kg
	Guinea pig	250 mg/kg
	Mouse	131 mg/kg
	Rat	140 mg/kg
<i>Other</i>		
LD50	Mouse	82 mg/kg
	Rat	130 mg/kg
2,4,5-Trichlorophenol (CAS 95-95-4)		
Acute		
<i>Oral</i>		
LD50	Rat	820 mg/kg
		0.82 g/kg
<i>Other</i>		
LD50	Rat	355 mg/kg
2,4,6-Trichlorophenol (CAS 88-06-2)		
Acute		
<i>Oral</i>		
LD50	Rat	820 mg/kg
<i>Other</i>		
LD50	Rat	276 mg/kg
2,4-Dichlorophenol (CAS 120-83-2)		
Acute		
<i>Dermal</i>		
LD50	Mouse	3100 mg/kg
	Rat	780 mg/kg
<i>Oral</i>		
LD50	Guinea pig	500 - 1000 mg/kg
	Mouse	1134 mg/kg
	Rat	580 mg/kg
<i>Other</i>		
LD50	Mouse	153 mg/kg
	Rat	430 mg/kg
2,4-Dimethylphenol (CAS 105-67-9)		
Acute		
<i>Dermal</i>		
LD50	Mouse	1040 mg/kg
	Rat	1040 mg/kg
<i>Oral</i>		
LD50	Mouse	809 mg/kg
	Rat	2300 mg/kg
<i>Other</i>		
LD50	Mouse	100 mg/kg
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)		
Acute		
<i>Oral</i>		
LD50	Dog	20 mg/kg
	Mouse	45 mg/kg
	Rabbit	30 mg/kg

Components	Species	Test Results
	Rat	30 mg/kg
<i>Other</i>		
LD50	Dog	20 mg/kg
	Mouse	26 mg/kg
	Rat	20 mg/kg
2,6-Dichlorophenol (CAS 87-65-0)		
Acute		
<i>Oral</i>		
LD50	Mouse	2120 mg/kg
<i>Other</i>		
LD50	Rat	390 mg/kg
2-Chlorophenol (CAS 95-57-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	740 mg/kg
<i>Oral</i>		
LD50	Mouse	670 mg/kg
	Rat	670 mg/kg
<i>Other</i>		
LD50	Rat	950 mg/kg
2-Methylphenol (CAS 95-48-7)		
Acute		
<i>Dermal</i>		
LD50	Mouse	620 mg/kg
	Rabbit	890 mg/kg
	Rat	620 mg/kg
<i>Inhalation</i>		
LC50	Mouse	0.179 mg/l, 2 Hours 0.178 mg/l
	Rat	> 20 mg/l, 6 Hours > 1.22 mg/l, 1 Hours
<i>Oral</i>		
LD50	Mouse	344 mg/kg
	Rabbit	800 mg/kg
	Rat	121 mg/kg
<i>Other</i>		
LD50	Mouse	350 mg/kg
	Rabbit	180 mg/kg
2-Nitrophenol (CAS 88-75-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 7940 mg/kg
	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Mouse	1300 mg/kg
	Rat	336 mg/kg
<i>Other</i>		
LD50	Dog	100 mg/kg
	Mouse	200 mg/kg
LDL0	Dog	100 mg/kg

Components	Species	Test Results
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)		
Acute		
<i>Dermal</i>		
LD50	Rat	200 mg/kg
<i>Oral</i>		
LD50	Cat	50 mg/kg
	Goat	100 mg/kg
	Mouse	21 mg/kg
	Rat	26 mg/kg
	Sheep	200 mg/kg
<i>Other</i>		
LD50	Mouse	19 mg/kg
	Rabbit	1000 mg/kg
	Rat	25.6 mg/kg
4-Chloro-3-methylphenol (CAS 59-50-7)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 5000 mg/kg
<i>Oral</i>		
LD50	Mouse	600 mg/kg
	Rat	3636 mg/kg
<i>Other</i>		
LD50	Mouse	70 mg/kg
	Rat	400 mg/kg
4-Methylphenol (CAS 106-44-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	300 mg/kg
	Rat	750 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 0.71 mg/l, 1 Hours 0.029 mg/l
<i>Oral</i>		
LD50	Mouse	344 mg/kg
	Rabbit	620 mg/kg
	Rat	207 mg/kg
<i>Other</i>		
LD50	Rabbit	180 mg/kg
4-Nitrophenol (CAS 100-02-7)		
Acute		
<i>Oral</i>		
LD50	Mouse	380 mg/kg
	Rabbit	220 mg/kg
	Rat	220 - 620 mg/kg
<i>Other</i>		
LD50	Mouse	75 mg/kg
Benzoic acid (CAS 65-85-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 12.2 mg/l, 4 Hours

Components	Species	Test Results
		> 0.026 mg/l, 1 Hours
<i>Oral</i>		
LD50	Cat	2000 mg/kg
	Dog	2000 mg/kg
	Mouse	1940 mg/kg
	Rat	1700 mg/kg
<i>Other</i>		
LD50	Mouse	1460 mg/kg
Methylene chloride (CAS 75-09-2)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Guinea pig	11600 ppm, 6 Hours 40.2 mg/l, 6 Hours
	Mouse	14400 ppm, 7 Hours 51.5 mg/l, 2 Hours 49.1 mg/l, 6 Hours 49 mg/l, 7 Hours
	Rat	2000 mg/l, 15 Minutes 88 mg/l, 900 Days 79 mg/l, 2 Hours 52 mg/l, 6 Hours
LD50	Mouse	16000 ppm, 7 Hours
<i>Oral</i>		
LD50	Rat	1600 mg/kg
<i>Other</i>		
LD50	Mouse	437 mg/kg
Pentachlorophenol (CAS 87-86-5)		
Acute		
<i>Dermal</i>		
LD50	Rat	96 mg/kg
<i>Oral</i>		
LD50	Rat	146 mg/kg
Phenol (CAS 108-95-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	850 mg/kg
	Rat	525 mg/kg
<i>Inhalation</i>		
LC50	Mouse	0.177 mg/l
	Rat	0.316 mg/l
<i>Oral</i>		
LD50	Cat	0.1 g/kg
	Dog	0.5 g/kg
	Mouse	270 mg/kg
	Rabbit	620 mg/kg
	Rat	317 mg/kg
<i>Other</i>		
LD50	Mouse	112 mg/kg
	Rabbit	180 mg/kg

Components	Species	Test Results
	Rat	460 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
2,3,4,6-Tetrachlorophenol (CAS 58-90-2)	2B Possibly carcinogenic to humans.	
2,4,5-Trichlorophenol (CAS 95-95-4)	2B Possibly carcinogenic to humans.	
2,4,6-Trichlorophenol (CAS 88-06-2)	2B Possibly carcinogenic to humans.	
2,4-Dichlorophenol (CAS 120-83-2)	2B Possibly carcinogenic to humans.	
2,6-Dichlorophenol (CAS 87-65-0)	2B Possibly carcinogenic to humans.	
2-Chlorophenol (CAS 95-57-8)	2B Possibly carcinogenic to humans.	
4-Chloro-3-methylphenol (CAS 59-50-7)	2B Possibly carcinogenic to humans.	
Methylene chloride (CAS 75-09-2)	2B Possibly carcinogenic to humans.	
Pentachlorophenol (CAS 87-86-5)	2B Possibly carcinogenic to humans.	
Phenol (CAS 108-95-2)	3 Not classifiable as to carcinogenicity to humans.	
US. National Toxicology Program (NTP) Report on Carcinogens		
2,4,6-Trichlorophenol (CAS 88-06-2)	Reasonably Anticipated to be a Human Carcinogen.	
Methylene chloride (CAS 75-09-2)	Reasonably Anticipated to be a Human Carcinogen.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Methylene chloride (CAS 75-09-2)	Cancer	
Reproductive toxicity	May damage fertility or the unborn child.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.	

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Components	Species	Test Results
2,3,4,6-Tetrachlorophenol (CAS 58-90-2)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) 0.11 - 0.16 mg/l, 96 hours
2,4,5-Trichlorophenol (CAS 95-95-4)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 0.72 - 1.2 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 0.39 - 0.54 mg/l, 96 hours
2,4,6-Trichlorophenol (CAS 88-06-2)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.8 - 2.6 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 0.35 - 0.49 mg/l, 96 hours
2,4-Dichlorophenol (CAS 120-83-2)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.2 - 1.7 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 1.6 - 2.6 mg/l, 96 hours

Components		Species	Test Results
2,4-Dimethylphenol (CAS 105-67-9)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.77 - 3.17 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	4.1 - 9.6 mg/l, 96 hours
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.4 - 5.66 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus)	0.9 mg/l, 96 hours
2,6-Dichlorophenol (CAS 87-65-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.4 mg/l, 48 hours
Fish	LC50	Medaka, high-eyes (Oryzias latipes)	3.3 - 11 mg/l, 96 hours
2-Chlorophenol (CAS 95-57-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.31 - 4.91 mg/l, 48 hours
Fish	LC50	Starry, european flounder (Platichthys flesus)	6.99 mg/l, 96 hours
2-Methylphenol (CAS 95-48-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	15.8 mg/l, 48 hours
Fish	LC50	Ide, silver or golden orfe (Leuciscus idus)	10 mg/l, 96 hours
2-Nitrophenol (CAS 88-75-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	11 - 25 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	15 - 67 mg/l, 96 hours
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	0.1 - 0.21 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.037 - 0.117 mg/l, 96 hours
4-Chloro-3-methylphenol (CAS 59-50-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.13 - 1.94 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	1 - 10 mg/l, 96 hours
4-Methylphenol (CAS 106-44-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 mg/l, 48 hours
Fish	LC50	Fish (Lepidocephalichthyes guntea)	6.15 - 7.96 mg/l, 96 hours
4-Nitrophenol (CAS 100-02-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.1 - 7.1 mg/l, 48 hours
Fish	LC50	Zebra danio (Danio rerio)	5.6 - 13.9 mg/l, 96 hours
Benzoic acid (CAS 65-85-0)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	180 mg/l, 96 hours
Methylene chloride (CAS 75-09-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1250 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	140.8 - 277.8 mg/l, 96 hours

Components	Species		Test Results
Pentachlorophenol (CAS 87-86-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.273 - 0.375 mg/l, 48 hours
Fish	LC50	Atlantic salmon (Salmo salar)	0.042 - 0.083 mg/l, 96 hours
Phenol (CAS 108-95-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia obtusa)	4.7 - 6.4 mg/l, 48 hours
Fish	LC50	Asiatic knifefish (Notopterus notopterus)	8 - 8.25 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

2,3,4,6-Tetrachlorophenol	4.45
2,4,5-Trichlorophenol	3.72
2,4,6-Trichlorophenol	3.69
2,4-Dichlorophenol	3.06
2,4-Dimethylphenol	2.3
2,4-Dinitrophenol (min 15wt% water)	1.67
2,6-Dichlorophenol	2.75
2-Chlorophenol	2.15
2-Methylphenol	1.95
2-Nitrophenol	1.79
4,6-Dinitro-o-cresol (contains ~10% water)	2.13
4-Chloro-3-methylphenol	3.1
4-Methylphenol	1.94
4-Nitrophenol	1.91
Benzoic acid	1.87
Methylene chloride	1.25
Pentachlorophenol	5.12
Phenol	1.46

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste P List: Reference

2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)	P048
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	P047

US RCRA Hazardous Waste U List: Reference

2,4-Dichlorophenol (CAS 120-83-2)	U081
2,4-Dimethylphenol (CAS 105-67-9)	U101
2,6-Dichlorophenol (CAS 87-65-0)	U082
2-Chlorophenol (CAS 95-57-8)	U048
2-Methylphenol (CAS 95-48-7)	U052
4-Chloro-3-methylphenol (CAS 59-50-7)	U039
4-Methylphenol (CAS 106-44-5)	U052
4-Nitrophenol (CAS 100-02-7)	U170
Methylene chloride (CAS 75-09-2)	U080
Phenol (CAS 108-95-2)	U188

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information**DOT**

UN number	UN1593
UN proper shipping name	Dichloromethane, solution, MARINE POLLUTANT
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Label(s)	6.1
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, IP8, N36, T7, TP2
Packaging exceptions	153
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN1593
UN proper shipping name	Dichloromethane solution
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	6L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1593
UN proper shipping name	DICHLOROMETHANE SOLUTION, MARINE POLLUTANT
Transport hazard class(es)	
Class	6.1(PGIII)
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-A
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

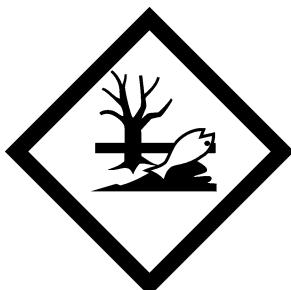
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

DOT

IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

2,4,5-Trichlorophenol (CAS 95-95-4)	0.1 % One-Time Export Notification only.
2,4-Dichlorophenol (CAS 120-83-2)	0.1 % One-Time Export Notification only.
2,6-Dichlorophenol (CAS 87-65-0)	0.1 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

2,3,4,6-Tetrachlorophenol (CAS 58-90-2)	Listed.
2,4,5-Trichlorophenol (CAS 95-95-4)	Listed.
2,4,6-Trichlorophenol (CAS 88-06-2)	Listed.
2,4-Dichlorophenol (CAS 120-83-2)	Listed.
2,4-Dimethylphenol (CAS 105-67-9)	Listed.
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)	Listed.
2,6-Dichlorophenol (CAS 87-65-0)	Listed.
2-Chlorophenol (CAS 95-57-8)	Listed.
2-Methylphenol (CAS 95-48-7)	Listed.
2-Nitrophenol (CAS 88-75-5)	Listed.
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	Listed.
4-Chloro-3-methylphenol (CAS 59-50-7)	Listed.
4-Methylphenol (CAS 106-44-5)	Listed.
4-Nitrophenol (CAS 100-02-7)	Listed.
Benzoic acid (CAS 65-85-0)	Listed.
Methylene chloride (CAS 75-09-2)	Listed.
Pentachlorophenol (CAS 87-86-5)	Listed.
Phenol (CAS 108-95-2)	Listed.

SARA 304 Emergency release notification

2-Methylphenol (CAS 95-48-7)	100 LBS
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	10 LBS
Phenol (CAS 108-95-2)	1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Methylene chloride (CAS 75-09-2)	Cancer Heart Central nervous system Liver Skin irritation Eye irritation
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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
2-Methylphenol	95-48-7	100		1000 lbs	10000 lbs
4,6-Dinitro-o-cresol (contains ~10% water)	534-52-1	10		10 lbs	10000 lbs
Phenol	108-95-2	1000		500 lbs	10000 lbs

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methylene chloride	75-09-2	90 - 100
2,3,4,6-Tetrachlorophenol	58-90-2	0.1
2,4,6-Trichlorophenol	88-06-2	0.1
2,6-Dichlorophenol	87-65-0	0.1
2-Chlorophenol	95-57-8	0.1
4-Chloro-3-methylphenol	59-50-7	0.1
Pentachlorophenol	87-86-5	0.1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

2,4,5-Trichlorophenol (CAS 95-95-4)
 2,4,6-Trichlorophenol (CAS 88-06-2)
 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)
 2-Methylphenol (CAS 95-48-7)
 4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)
 4-Methylphenol (CAS 106-44-5)
 4-Nitrophenol (CAS 100-02-7)
 Methylene chloride (CAS 75-09-2)
 Pentachlorophenol (CAS 87-86-5)
 Phenol (CAS 108-95-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

2,3,4,6-Tetrachlorophenol (CAS 58-90-2)
 2,4,5-Trichlorophenol (CAS 95-95-4)
 2,4,6-Trichlorophenol (CAS 88-06-2)
 2,4-Dichlorophenol (CAS 120-83-2)
 2,4-Dimethylphenol (CAS 105-67-9)
 2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)
 2,6-Dichlorophenol (CAS 87-65-0)
 2-Chlorophenol (CAS 95-57-8)
 2-Methylphenol (CAS 95-48-7)
 2-Nitrophenol (CAS 88-75-5)
 4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)
 4-Chloro-3-methylphenol (CAS 59-50-7)
 4-Methylphenol (CAS 106-44-5)
 4-Nitrophenol (CAS 100-02-7)
 Benzoic acid (CAS 65-85-0)
 Methylene chloride (CAS 75-09-2)
 Pentachlorophenol (CAS 87-86-5)
 Phenol (CAS 108-95-2)

US. New Jersey Worker and Community Right-to-Know Act

2,3,4,6-Tetrachlorophenol (CAS 58-90-2) 500 LBS
 2,4,5-Trichlorophenol (CAS 95-95-4) 500 LBS
 2,4,6-Trichlorophenol (CAS 88-06-2) 500 LBS

2,4-Dichlorophenol (CAS 120-83-2)	500 LBS
2,4-Dimethylphenol (CAS 105-67-9)	500 LBS
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)	500 LBS
2,6-Dichlorophenol (CAS 87-65-0)	500 LBS
2-Chlorophenol (CAS 95-57-8)	500 LBS
2-Methylphenol (CAS 95-48-7)	500 LBS
2-Nitrophenol (CAS 88-75-5)	500 LBS
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)	10 LBS
4-Chloro-3-methylphenol (CAS 59-50-7)	500 LBS
4-Methylphenol (CAS 106-44-5)	500 LBS
4-Nitrophenol (CAS 100-02-7)	500 LBS
Methylene chloride (CAS 75-09-2)	500 LBS
Pentachlorophenol (CAS 87-86-5)	500 LBS
Phenol (CAS 108-95-2)	500 LBS

US. Pennsylvania RTK - Hazardous Substances

2,3,4,6-Tetrachlorophenol (CAS 58-90-2)
2,4,5-Trichlorophenol (CAS 95-95-4)
2,4,6-Trichlorophenol (CAS 88-06-2)
2,4-Dichlorophenol (CAS 120-83-2)
2,4-Dimethylphenol (CAS 105-67-9)
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)
2,6-Dichlorophenol (CAS 87-65-0)
2-Chlorophenol (CAS 95-57-8)
2-Methylphenol (CAS 95-48-7)
2-Nitrophenol (CAS 88-75-5)
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)
4-Chloro-3-methylphenol (CAS 59-50-7)
4-Methylphenol (CAS 106-44-5)
4-Nitrophenol (CAS 100-02-7)
Benzoic acid (CAS 65-85-0)
Methylene chloride (CAS 75-09-2)
Pentachlorophenol (CAS 87-86-5)
Phenol (CAS 108-95-2)

US. Rhode Island RTK

2,3,4,6-Tetrachlorophenol (CAS 58-90-2)
2,4,5-Trichlorophenol (CAS 95-95-4)
2,4,6-Trichlorophenol (CAS 88-06-2)
2,4-Dichlorophenol (CAS 120-83-2)
2,4-Dimethylphenol (CAS 105-67-9)
2,4-Dinitrophenol (min 15wt% water) (CAS 51-28-5)
2,6-Dichlorophenol (CAS 87-65-0)
2-Chlorophenol (CAS 95-57-8)
2-Methylphenol (CAS 95-48-7)
2-Nitrophenol (CAS 88-75-5)
4,6-Dinitro-o-cresol (contains ~10% water) (CAS 534-52-1)
4-Chloro-3-methylphenol (CAS 59-50-7)
4-Methylphenol (CAS 106-44-5)
4-Nitrophenol (CAS 100-02-7)
Benzoic acid (CAS 65-85-0)
Methylene chloride (CAS 75-09-2)
Pentachlorophenol (CAS 87-86-5)
Phenol (CAS 108-95-2)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

2,4,6-Trichlorophenol (CAS 88-06-2)	Listed: January 1, 1988
Methylene chloride (CAS 75-09-2)	Listed: April 1, 1988
Pentachlorophenol (CAS 87-86-5)	Listed: January 1, 1990

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-15-2014
Version # 01
NFPA ratings Health: 2
Flammability: 1
Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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