

SAFETY DATA SHEET

1. Identification

| | | |
|---|---|-----------------|
| Product identifier | EPA Method 8041A Phenols Mixture 2 | |
| Other means of identification | | |
| Item | M-CS8041A2L5 | |
| 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 | Flammable liquids | Category 2 |
| Health hazards | Acute toxicity, oral | Category 4 |
| | Acute toxicity, dermal | Category 3 |
| | Acute toxicity, inhalation | Category 3 |
| | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Carcinogenicity | Category 2 |
| | Reproductive toxicity | Category 1 |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| 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

Highly flammable liquid and vapor. Harmful if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage

Keep cool. 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)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

97.75% of the mixture consists of component(s) of unknown acute inhalation toxicity. 97.75% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 97.75% 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 | % |
|---------------------------|---------------------------------|------------|-------|
| 2-Propanol | Isopropyl alcohol (isopropanol) | 67-63-0 | 97.75 |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 0.25 |
| 2,4,5-Trichlorophenol | | 95-95-4 | 0.25 |
| 2,4-Dimethylphenol | | 105-67-9 | 0.25 |
| 2,4-Dinitrophenol | | 51-28-5 | 0.25 |
| 2,6-Dichlorophenol | | 87-65-0 | 0.25 |
| 2-Chlorophenol | | 95-57-8 | 0.25 |
| 2-Methylphenol | | 95-48-7 | 0.25 |
| 4-Methylphenol | | 106-44-5 | 0.25 |
| Dinoseb | | 88-85-7 | 0.25 |

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

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing 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.

Ingestion

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

| | |
|--|---|
| General information | Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. |
| 5. Fire-fighting measures | |
| Suitable extinguishing media | Water fog. Alcohol resistant foam. Carbon dioxide (CO ₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. 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 | In case of fire and/or explosion do not breathe fumes. 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 | Highly flammable liquid and vapor. |
| 6. Accidental release measures | |
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. 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 | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. 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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination. |

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 handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not taste or swallow. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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/m3 5 ppm |
| 2-Propanol (CAS 67-63-0) | PEL | 980 mg/m3 400 ppm |
| 4-Methylphenol (CAS 106-44-5) | PEL | 22 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. |
| 2-Propanol (CAS 67-63-0) | STEL | 400 ppm | |
| | TWA | 200 ppm | |
| 4-Methylphenol (CAS 106-44-5) | TWA | 20 mg/m3 | Inhalable fraction and vapor. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|------------------------------|------|---------------------------------|
| 2-Methylphenol (CAS 95-48-7) | TWA | 10 mg/m3 |
| 2-Propanol (CAS 67-63-0) | STEL | 2.3 ppm 1225 mg/m3 |
| | TWA | 500 ppm 980 mg/m3 400 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|-------------------------------|------|---------------------------------|
| 4-Methylphenol (CAS 106-44-5) | TWA | 10 mg/m ³ 2.3 ppm |

Biological limit values**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|--------------------------|---------|-------------|----------|---------------|
| 2-Propanol (CAS 67-63-0) | 40 mg/l | Acetone | 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-Methylphenol (CAS 106-44-5) | Can be absorbed through the skin. |

US - Minnesota Haz Subs: Skin designation applies

| | |
|-------------------------------|---------------------------|
| 2-Methylphenol (CAS 95-48-7) | Skin designation applies. |
| 4-Methylphenol (CAS 106-44-5) | Skin designation applies. |

US - Tennessee OELs: Skin designation

| | |
|-------------------------------|-----------------------------------|
| 2-Methylphenol (CAS 95-48-7) | Can be absorbed through the skin. |
| 4-Methylphenol (CAS 106-44-5) | 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-Methylphenol (CAS 106-44-5) | Can be absorbed through the skin. |

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-Methylphenol (CAS 106-44-5) | Can be absorbed through the skin. |

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. 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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. 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.

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 -127.3 °F (-88.5 °C) estimated

Initial boiling point and boiling range 180.5 °F (82.5 °C) estimated

| | |
|---|-----------------------------|
| Flash point | 53.6 °F (12.0 °C) estimated |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | 2.5 % estimated |
| Flammability limit - upper (%) | 12 % estimated |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 60.53 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 | 750.2 °F (399 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 0.79612 g/cm3 estimated |
| Explosive properties | Not explosive. |
| Flammability class | Flammable IB estimated |
| Oxidizing properties | Not oxidizing. |
| Percent volatile | 98.5 % estimated |
| Specific gravity | 0.8 estimated |
| VOC | 99 % 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 | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Acids. Strong oxidizing agents. Isocyanates. Chlorine. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|---|
| Inhalation | Toxic if inhaled. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| Skin contact | Toxic in contact with skin. Causes skin irritation. |
| Eye contact | Causes serious eye irritation. |
| Ingestion | Harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Toxic if inhaled. Toxic in contact with skin. Harmful if swallowed.

| Components | Species | Test Results |
|---|---------|--------------------|
| 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 250 mg/kg |
| Oral | | |
| LD50 | Rat | 140 mg/kg |
| 2,4,5-Trichlorophenol (CAS 95-95-4) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 0.82 g/kg |
| 2,4-Dinitrophenol (CAS 51-28-5) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 30 mg/kg |
| 2-Chlorophenol (CAS 95-57-8) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 740 mg/kg |
| 2-Methylphenol (CAS 95-48-7) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 121 mg/kg |
| 2-Propanol (CAS 67-63-0) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 4.7 g/kg |
| 4-Methylphenol (CAS 106-44-5) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 300 mg/kg |
| Oral | | |
| LD50 | Rat | 207 mg/kg |
| Dinoseb (CAS 88-85-7) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rat | 30 mg/kg, 24 Hours |

* 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 | Not a respiratory sensitizer. |
| Skin sensitization | This product is not expected to cause skin sensitization. |
| 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. |
| 2,6-Dichlorophenol (CAS 87-65-0) | 2B Possibly carcinogenic to humans. |
| 2-Chlorophenol (CAS 95-57-8) | 2B Possibly carcinogenic to humans. |

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

| | |
|---|--|
| Reproductive toxicity | May damage fertility or the unborn child. |
| Specific target organ toxicity - single exposure | May cause drowsiness and dizziness. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. |

12. Ecological information**Ecotoxicity** Toxic to aquatic life with long lasting effects.

| Components | Species | Test Results |
|---|---|----------------------------|
| 2,3,4,6-Tetrachlorophenol (CAS 58-90-2) | | |
| Aquatic | | |
| Fish LC50 | Bluegill (<i>Lepomis macrochirus</i>) | 0.11 - 0.16 mg/l, 96 hours |
| 2,4,5-Trichlorophenol (CAS 95-95-4) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 0.72 - 1.2 mg/l, 48 hours |
| Fish LC50 | Bluegill (<i>Lepomis macrochirus</i>) | 0.39 - 0.54 mg/l, 96 hours |
| 2,4-Dimethylphenol (CAS 105-67-9) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 1.77 - 3.17 mg/l, 48 hours |
| Fish LC50 | Bluegill (<i>Lepomis macrochirus</i>) | 4.1 - 9.6 mg/l, 96 hours |
| 2,4-Dinitrophenol (CAS 51-28-5) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 3.4 - 5.66 mg/l, 48 hours |
| Fish LC50 | Asiatic knifefish (<i>Notopterus notopterus</i>) | 0.9 mg/l, 96 hours |
| 2,6-Dichlorophenol (CAS 87-65-0) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 3.4 mg/l, 48 hours |
| Fish LC50 | Medaka, high-eyes (<i>Oryzias latipes</i>) | 3.3 - 11 mg/l, 96 hours |
| 2-Chlorophenol (CAS 95-57-8) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 3.31 - 4.91 mg/l, 48 hours |
| Fish LC50 | Starry, european flounder (<i>Platichthys flesus</i>) | 6.99 mg/l, 96 hours |
| 2-Methylphenol (CAS 95-48-7) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 15.8 mg/l, 48 hours |
| Fish LC50 | Ide, silver or golden orfe (<i>Leuciscus idus</i>) | 10 mg/l, 96 hours |
| 2-Propanol (CAS 67-63-0) | | |
| Aquatic | | |
| Fish LC50 | Bluegill (<i>Lepomis macrochirus</i>) | > 1400 mg/l, 96 hours |
| 4-Methylphenol (CAS 106-44-5) | | |
| Aquatic | | |
| Crustacea EC50 | Water flea (<i>Daphnia magna</i>) | 7.7 mg/l, 48 hours |
| Fish LC50 | Fish (<i>Lepidocephalichthyes guntea</i>) | 6.15 - 7.96 mg/l, 96 hours |

| Components | Species | Test Results |
|-----------------------|--|------------------------------|
| Dinoseb (CAS 88-85-7) | | |
| Aquatic | | |
| Fish | LC50 Lake trout, siscowet (Salvelinus namaycush) | 0.024 - 0.054 mg/l, 96 hours |

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

Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

| | |
|---------------------------|------|
| 2,3,4,6-Tetrachlorophenol | 4.45 |
| 2,4,5-Trichlorophenol | 3.72 |
| 2,4-Dimethylphenol | 2.3 |
| 2,4-Dinitrophenol | 1.67 |
| 2,6-Dichlorophenol | 2.75 |
| 2-Chlorophenol | 2.15 |
| 2-Methylphenol | 1.95 |
| 2-Propanol | 0.05 |
| 4-Methylphenol | 1.94 |

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 (CAS 51-28-5) | P048 |
| Dinoseb (CAS 88-85-7) | P020 |

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

14. Transport information

| | |
|-------------------------------------|--|
| DOT | |
| UN number | UN1219 |
| UN proper shipping name | Isopropanol or Isopropyl alcohol, solution (2-Propanol RQ = 102 LBS), MARINE POLLUTANT (2,4-Dimethylphenol, 2,4-Dinitrophenol) |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Label(s) | 3 |
| Packing group | II |
| Environmental hazards | |
| Marine pollutant | Yes |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | IB2, T4, TP1 |
| Packaging exceptions | 4b, 150 |
| Packaging non bulk | 202 |
| Packaging bulk | 242 |

IATA

UN number UN1219

UN proper shipping name Isopropanol solution (2-Propanol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards Yes
ERG Code 3L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1219
UN proper shipping name ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION (2-Propanol), MARINE POLLUTANT (2,4-Dinitrophenol)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards
Marine pollutant Yes
EmS F-E, S-D
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
 2,4-Dinitrophenol

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

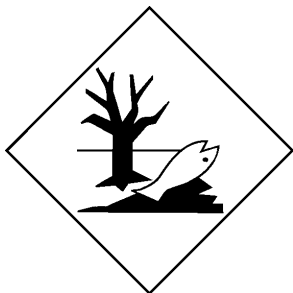
DOT



IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated 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.

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.
2,6-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-Dimethylphenol (CAS 105-67-9) Listed.
2,4-Dinitrophenol (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-Propanol (CAS 67-63-0) Listed.
4-Methylphenol (CAS 106-44-5) Listed.
Dinoseb (CAS 88-85-7) Listed.

SARA 304 Emergency release notification

- 2-Methylphenol (CAS 95-48-7) 100 LBS
Dinoseb (CAS 88-85-7) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Table with 6 columns: Chemical name, CAS number, Reportable quantity (pounds), Threshold planning quantity (pounds), Threshold planning quantity, lower value (pounds), Threshold planning quantity, upper value (pounds). Rows include 2-Methylphenol and Dinoseb.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Table with 3 columns: Chemical name, CAS number, % by wt. Rows include 2,3,4,6-Tetrachlorophenol, 2,6-Dichlorophenol, 2-Chlorophenol, and 2-Propanol.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

- 2,4,5-Trichlorophenol (CAS 95-95-4)
2,4-Dinitrophenol (CAS 51-28-5)
2-Methylphenol (CAS 95-48-7)

4-Methylphenol (CAS 106-44-5)

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

2-Methylphenol (CAS 95-48-7) Low priority
2-Propanol (CAS 67-63-0) Low priority
4-Methylphenol (CAS 106-44-5) Low priority

US state regulations WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Dinoseb (CAS 88-85-7) Listed: January 1, 1989

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Dinoseb (CAS 88-85-7) Listed: January 1, 1989

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2,4-Dimethylphenol (CAS 105-67-9)
2,4-Dinitrophenol (CAS 51-28-5)
2-Methylphenol (CAS 95-48-7)
2-Propanol (CAS 67-63-0)
4-Methylphenol (CAS 106-44-5)

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 |
| 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 05-03-2019
Revision date 05-03-2019
Version # 02
NFPA ratings Health: 3
Flammability: 3
Instability: 0

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