

# Material Safety Data Sheet

## 2,4-Dimethylphenol, 99%

ACC# 14357

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2,4-Dimethylphenol, 99%

**Catalog Numbers:** AC408450050, AC408450250, AC408451000

**Synonyms:** 2,4-Xylenol; 4,6-Dimethylphenol Benzene; 1-Hydroxy-2,4-Dimethyl Benzene; M-Xylenol.

**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01

**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
105-67-9	2,4-Dimethylphenol	99	203-321-6

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

**Appearance:** colorless or almost colorless crystals.

**Danger!** Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if swallowed or absorbed through the skin. May cause kidney damage.

**Target Organs:** Kidneys, respiratory system, gastrointestinal system, eyes, skin.

#### Potential Health Effects

**Eye:** Causes eye burns.

**Skin:** Harmful if absorbed through the skin. Causes skin burns.

**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns. A case of fatal xylene ingestion by a long stay mental hospital patient is described. Clinical course was similar to that observed in other phenolic poisonings with active bowel sounds, nausea, vomiting, severe metabolic acidosis, hypotension, and cardiac and renal failure.

**Inhalation:** Causes chemical burns to the respiratory tract.

**Chronic:** May cause kidney damage. Chronic exposure may cause effects similar to those of acute exposure.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

**Ingestion:** If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust from this material can form explosive organic dust cloud.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

**Flash Point:** 96 deg C ( 204.80 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** 1.40 vol %

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 1; Instability: 0

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store in metal containers.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2,4-Dimethylphenol	none listed	none listed	none listed

**OSHA Vacated PELs:** 2,4-Dimethylphenol: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystals

**Appearance:** colorless or almost colorless

**Odor:** Characteristic phenolic odor.

**pH:** Not available.

**Vapor Pressure:** 10 mm Hg @92.3

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 211 deg C

**Freezing/Melting Point:** 21-26 deg C

**Decomposition Temperature:** Not available.

**Solubility:** 0.5% (25°C)

**Specific Gravity/Density:** .9700 g/cm<sup>3</sup>

**Molecular Formula:** C<sub>8</sub>H<sub>10</sub>O

**Molecular Weight:** 122.17

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** Bases - acid chlorides - acid anhydrides - oxidizing agents - corrodes steel - brass - copper - copper alloys.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 105-67-9: ZE5600000

### LD50/LC50:

**CAS#** 105-67-9:

Oral, mouse: LD50 = 809 mg/kg;

Oral, rat: LD50 = 3200 mg/kg;

Skin, rat: LD50 = 1040 mg/kg;

### Carcinogenicity:

**CAS#** 105-67-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** Terrestrial: Would adsorb moderately to soil. It is reported to have been biodegraded in soil in 4 days at 19 deg C. Aquatic: May adsorb moderately to sediment and will be readily biodegradable. Atmospheric: Should degrade by reaction with photochemically produced hydroxyl radicals (half-life 8 hr). Expected to slightly bioconcentrate.

**Physical:** No information available.

**Other:** No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:**

CAS# 105-67-9: waste number U101.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	TOXIC SOLIDS, CORROSIVE, ORGANIC, N.O.S.	Toxic Solid, Corrosive, Organic, N.O.S.
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN2928	UN2928
<b>Packing Group:</b>	II	II

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 105-67-9 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

CAS# 105-67-9: 100 lb final RQ; 45.4 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 105-67-9: immediate.

#### Section 313

This material contains 2,4-Dimethylphenol (CAS# 105-67-9, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. CAS# 105-67-9 is listed as a Priority Pollutant under the Clean Water Act. CAS# 105-67-9 is listed as a Toxic Pollutant under the Clean Water Act.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 105-67-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

T C N

#### Risk Phrases:

R 34 Causes burns.

R 24/25 Toxic in contact with skin and if swallowed.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

**WGK (Water Danger/Protection)**

CAS# 105-67-9: No information available.

**Canada - DSL/NDSL**

CAS# 105-67-9 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of E, D1A.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 105-67-9 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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**MSDS Creation Date:** 4/16/1999

**Revision #4 Date:** 1/09/2006

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*