



Health	2
Fire	1
Reactivity	0
Personal Protection	E

# Material Safety Data Sheet

## Phenacetin MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Phenacetin

**Catalog Codes:** SLP5155

**CAS#:** 62-44-2

**RTECS:** AM4375000

**TSCA:** TSCA 8(b) inventory: Phenacetin

**CI#:** Not applicable.

**Synonym:** N-(4-Ethoxyphenyl)acetamide; 1-Acetamido-4-ethoxybenzene; 4'-Ethoxyacetanilide; 4-Ethoxyacetanilide; Acet-p-phenalide; Acet-p-phenetidin; Acetamide, N-(4-ethoxyphenyl); Acetanilide, 4'ethoxy-, Aceto-4-phenetidine; Aceto-para-phenalide; Aceto-para-phenetidine; Acetophenetidin; Acetophenetidine; Acetophenetin; Acetophenetidin; Acetylphenetidin; p-Acetophenetide; p-Acetophenetidine; p-Acetphenetidin; p-Ethoxyacetanilide; p-Phenetidine, N-acetyl-; para-Acetophenetidine; para-Phenacetin; Phenaphen; Phenin; Phenodyne; Phenazetin

**Chemical Name:** p-Acetophenetidine

**Chemical Formula:** C<sub>10</sub>H<sub>13</sub>N<sub>2</sub>O<sub>2</sub>

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Phenacetin	62-44-2	100

**Toxicological Data on Ingredients:** Phenacetin: ORAL (LD50): Acute: 1650 mg/kg [Rat.]. 866 mg/kg [Mouse]. 2500 mg/kg [Rabbit].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Classified 2A (Probable for human.) by IARC, Anticipated carcinogen by NTP. **MUTAGENIC**

**EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The

substance may be toxic to blood, kidneys, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention if irritation occurs. Finish by rinsing thoroughly with running water to avoid a possible infection.

**Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact:** Not available.

**Inhalation:**

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

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

#### Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** As with most organic solids, fire is possible at elevated temperatures

**Special Remarks on Explosion Hazards:** Not available.

#### Section 6: Accidental Release Measures

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7: Handling and Storage****Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents, acids.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8: Exposure Controls/Personal Protection****Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

**Section 9: Physical and Chemical Properties**

**Physical state and appearance:** Solid. (Solid crystalline powder.)

**Odor:** Odorless.

**Taste:** Bitter. (Slight.)

**Molecular Weight:** 179.22 g/mole

**Color:** White.

**pH (1% soln/water):** Not available

**Boiling Point:** Decomposes.

**Melting Point:** 134°C (273.2°F) 137 C.

**Critical Temperature:** Not available.

**Specific Gravity:** Not available.

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** The product is more soluble in oil;  $\log(\text{oil/water}) = 1.6$

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, diethyl ether, acetone.

**Solubility:**

Soluble in acetone. Partially soluble in cold water, hot water, diethyl ether. 1g dissolves in 1310 ml cold water, 82 ml boiling water, 15 ml cold alcohol, 2.8 ml boiling alcohol, 14 ml chloroforml, 90 ml ether. Soluble in glycerol. Very soluble in pyrimidine. Slightly soluble in benzene. Solubility in water: 530 mg/l @ 25 deg. C.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, reducing agents, acids, alkalis.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:**

Incompatible with oxidizing agents such as perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine, fluorine. Incompatible with strong acids such as hydrochloric, sulfuric, and nitric. Incompatible with strong bases such as sodium hydroxide, potassium hydroxide. Incompatible with strong reducing agents.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 866 mg/kg [Mouse].

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified 2A (Probable for human.) by IARC, Anticipated carcinogen by NTP. May cause damage to the following organs: blood, kidneys, liver.

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**

May affect genetic material (mutagenic). May cause adverse reproductive effects and birth defects (teratogenic). May cause cancer. Human: detected in maternal milk.

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. It may cause methemoglobinemia (deficient oxygenation of the blood), cyanosis (bluish discoloration of skin and lips due to deficient oxygenation of the blood), which can result in fatigue, dizziness, headache, convulsions/seizures, tachycardia, hypertension, dyspnea (labored breathing), and death. Ingestion: May be harmful if swallowed. It may cause gastrointestinal disturbances, nausea. It may affect behavior/central nervous system (somnolence, convulsions/seizures, ataxia, dizziness, drowsiness, coma), respiration (labored breathing), and cardiovascular system. It may also affect the kidneys, and liver. Chronic Potential Health Effects: Ingestion: Repeated or prolonged ingestion may result in gastrointestinal disturbances, including peptic ulcer. Ingestion and Inhalation: Repeated exposure may affect the cardiovascular system (hypertension, cardiac arrest), liver (jaundice), kidneys (renal papillary necrosis, dark brown urine), blood (methemoglobinemia, cyanosis, thrombocytopenia, hemolytic anemia), thymus. Skin: Prolonged skin contact may cause allergic reaction (dermatitis).

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

**Federal and State Regulations:**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Phenacetin California prop. 65 (no significant risk level): Phenacetin: 0.3 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Phenacetin Connecticut hazardous material survey.: Phenacetin Illinois toxic substances disclosure to employee act: Phenacetin Illinois chemical safety act: Phenacetin New York release reporting list: Phenacetin Rhode Island RTK hazardous substances: Phenacetin Pennsylvania RTK: Phenacetin Minnesota: Phenacetin Massachusetts RTK: Phenacetin Massachusetts spill list: Phenacetin New Jersey: Phenacetin New Jersey spill list: Phenacetin Louisiana spill reporting: Phenacetin California Director's List of Hazardous Substances: Phenacetin TSCA 8(b) inventory: Phenacetin TSCA 4(a) proposed test rules: Phenacetin TSCA 5(a)2 final significant rules: Phenacetin TSCA 8(a) IUR: Phenacetin TSCA 12(b) annual export notification: Phenacetin CERCLA: Hazardous substances.: Phenacetin: 100 lbs. (45.36 kg)

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):**

R22- Harmful if swallowed. R45- May cause cancer. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53- Avoid exposure - obtain special instructions before use.

**HMIS (U.S.A.):**

**Health Hazard:** 2

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

## Section 16: Other Information

**References:**

-Hazardous Substance Data Bank (HSDB) -Registry of Toxic Effects of Chemical Substances (RTECS) -New Jersey Hazardous Substance Fact Sheets -Manufacturer's Material Safety Data Sheet. -Ariel Global View -Meditext

**Other Special Considerations:** Not available.

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