Material Safety Data Sheet
Acetanilide

ACC# 00115

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Acetanilide  
**Catalog Numbers:** AC150810000, AC150810050, AC150810051, AC400050250, AC400051000, 15081-0010, 15081-2500, 15081-5000, O1013-250  
**Synonyms:** N-Phenylacetamide  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**Emergency Number:** 201-796-7100  
**For CHEMTREC assistance, call:** 800-424-9300  
**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-84-4</td>
<td>Acetanilide</td>
<td>100</td>
<td>203-150-7</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white glistening crystals. solid.  
**Warning!** May cause eye, skin, and respiratory tract irritation. May cause allergic skin reaction. May be harmful if swallowed. May cause blood abnormalities. May cause central nervous system effects.  
**Target Organs:** Blood, kidneys, central nervous system, skin.

**Potential Health Effects**  
**Eye:** Dust may cause mechanical irritation.  
**Skin:** May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.  
**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract. May cause kidney damage. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Human systemic effects by ingestion may include: visual field changes, tinnitus, and nausea or vomiting. May cause hallucinations and distorted perceptions. Ingestion may cause kidney damage including acute tubular necrosis and acute renal failure.  
**Inhalation:** May cause respiratory tract irritation. May cause methemoglobinemia, cyanosis (bluish
discoloration of skin due to deficient oxygenation of the blood), convulsions, tachycardia, dyspnea (labored breathing), and death. May cause effects similar to those described for ingestion. Coal tar analgetics including acetanilide are depressants of the central nervous system. **Chronic:** Chronic exposure may cause effects similar to those of acute exposure.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

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

**Ingestion:** Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**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. Will burn if involved in a fire. Dust can be an explosion hazard when exposed to heat or flame. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Use water spray to cool fire-exposed containers.

**Flash Point:** 173 deg C (343.40 deg F)

**Autoignition Temperature:** 545 deg C (1,013.00 deg F)

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 1; Instability: 0

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Keep away from heat and flame. Store in a tightly closed container. Keep from contact with
oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong bases.

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 general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetanilide</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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</table>

OSHA Vacated PELs: Acetanilide: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate 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: Solid
Appearance: white glistening crystals.
Odor: Not available.
pH: Not available.
Vapor Pressure: 1 mm Hg @237 deg F
Vapor Density: 4.65 (air=1)
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: 304 deg C @ 760 mmHg
Freezing/Melting Point: 113 - 115 deg C
Decomposition Temperature: Not available.
Solubility: Slightly soluble.
Specific Gravity/Density: 1.21
Molecular Formula: C8H9NO
Molecular Weight: 135.17

Section 10 - Stability and Reactivity

Chemical Stability: Stable.
Conditions to Avoid: Dust generation.
Incompatibilities with Other Materials: Strong oxidizing agents, strong bases.
Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 103-84-4: AD7350000
LD50/LC50:
CAS# 103-84-4:
  Oral, mouse: LD50 = 1210 mg/kg;
  Oral, rat: LD50 = 800 mg/kg;

Carcinogenicity: CAS# 103-84-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: Micronucleus test(Intraperitoneal,mouse) = 50 mg/kg
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Fish: Bluegill/Sunfish: LC50 = 100 mg/L; 96 Hr.; Static, 23 degrees C No data available.
Environmental: An estimated BCF value of 4.5 was calculated for acetanilide, using an experimental log Kow of 1.16. According to a classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.
Physical: Acetanilide is not expected to undergo hydrolysis or direct photolysis in the environment due to the lack of functional groups to hydrolyze or absorb UV light.
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: None listed.

Section 14 - Transport Information

<table>
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<tr>
<th>US DOT</th>
<th>Canada TDG</th>
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http://fscimage.fishersci.com/msds/00115.htm
Shipping Name: Not regulated as a hazardous material
Hazard Class: No information available.
UN Number: 
Packing Group: 

Section 15 - Regulatory Information

US FEDERAL

TSCA
   CAS# 103-84-4 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
   None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
   None of the chemicals in this product have a TPQ.

SARA Codes
   CAS # 103-84-4: immediate, delayed.

Section 313
   No chemicals are reportable under Section 313.

Clean Air Act:
   This material does not contain any hazardous air pollutants.
   This material does not contain any Class 1 Ozone depletors.
   This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
   None of the chemicals in this product are listed as Hazardous Substances under the CWA.
   None of the chemicals in this product are listed as Priority Pollutants under the CWA.
   None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

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

STATE
   CAS# 103-84-4 can be found on the following state right to know lists: 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:
   XN

Risk Phrases:
   R 22 Harmful if swallowed.
Safety Phrases:

WGK (Water Danger/Protection)
   CAS# 103-84-4: 1
Canada - DSL/NDSL
   CAS# 103-84-4 is listed on Canada's DSL List.
Canada - WHMIS
   This product has a WHMIS classification of D2B.
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

Section 16 - Additional Information

MSDS Creation Date: 5/04/1999
Revision #5 Date: 11/20/2008

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.