Material Safety Data Sheet
Acetylsalicylic acid

ACC# 00300

Section 1 - Chemical Product and Company Identification

MSDS Name: Acetylsalicylic acid
Catalog Numbers: AC158180000, AC158180500, AC158185000, AC385760000
Synonyms: 2-Acetoxybenzoic acid; Aspirin.

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

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-78-2</td>
<td>Acetylsalicylic acid</td>
<td>99</td>
<td>200-064-1</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white powder.
Warning! Toxic if swallowed. Causes eye, skin, and respiratory tract irritation. Hygroscopic (absorbs moisture from the air).
Target Organs: Blood, respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May cause liver and kidney damage. Ingestion may cause high blood pressure, labored breathing, unsteady gait, lung edema, and coma. Human systemic effects include acute renal failure, acute tubular necrosis, cough, diarrhea, dyspnea (labored breathing), headache, hypermetility, nausea, vomiting, ulceration or bleeding from stomach. Toxic if swallowed. Inhibits platelet aggregation affecting bleeding time. High or repeated exposure may cause headache, dizziness, depression and irritability. If an allergic response develops, later exposures to even very small amounts can cause hives, difficulty breathing, and/or rapid drop in blood pressure.
Inhalation: Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. May be harmful if inhaled.
Chronic: Prolonged or repeated skin contact may cause dermatitis. Whether or not acetaylsalicylic acid (aspirin) is a human teratogen is controversial. There is no conclusive evidence that salicylates are
Section 4 - First Aid Measures

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

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

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or 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.

**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. Dangerous fire hazard in the form of dust when exposed to heat or flame.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 250 deg C (482.00 deg F)

**Autoignition Temperature:** 500 deg C (932.00 deg F)

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

**Upper:** Not available.

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

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. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetylsalicylic acid</td>
<td>5 mg/m³ TWA</td>
<td>5 mg/m³ TWA</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Acetylsalicylic acid: 5 mg/m³ TWA

**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 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:** Powder

**Appearance:** white

**Odor:** odorless

**pH:** 3.5 (2.5 g/L (20°C))

**Vapor Pressure:** 0.000003 mm Hg @ 25 deg C

**Vapor Density:** Not available.

**Evaporation Rate:** Not applicable.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 136 - 140 deg C

**Decomposition Temperature:** 140 deg C

**Solubility:** 3.3 g/L (20°C)

**Specific Gravity/Density:** 1.350

**Molecular Formula:** C9H8O4

**Molecular Weight:** 180.16

### Section 10 - Stability and Reactivity

**Chemical Stability:** Hygroscopic: absorbs moisture or water from the air.

**Conditions to Avoid:** Incompatible materials, dust generation, exposure to moist air or water.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, strong bases, alkalis.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

### Section 11 - Toxicological Information
**RTECS#:**
**CAS# 50-78-2: VO0700000**

**LD50/LC50:**
**CAS# 50-78-2:**
- Oral, mouse: LD50 = 250 mg/kg;
- Oral, rabbit: LD50 = 1010 mg/kg;
- Oral, rat: LD50 = 200 mg/kg;

Human oral LD50 estimated at 357 mg/kg. Other references state that a 10 g dose (143 mg/kg) may be fatal in humans.

**Carcinogenicity:**
**CAS# 50-78-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.**

**Epidemiology:** Epidemiological evidence has suggested the possibility of an association between the use of aspirin in the treatment of fever in children with chickenpox or influenza virus infections and the development of Reye's Syndrome.

**Teratogenicity:** Teratogenic effects have occurred in experimental animals. Whether or not aspirin is a human teratogen is controversial. Some studies have linked prenatal aspirin exposure with cardiac effects, but it has not been confirmed by other studies. The possibility of a weak teratogenic effect has not been conclusively ruled out however.

**Reproductive Effects:** See actual entry in RTECS for complete information.

**Mutagenicity:** Aspirin induced chromosome aberrations in cultured human fibroblasts. Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information found

**Other Studies:**

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**Section 12 - Ecological Information**

**Ecotoxicity:** Fish: Leuciscus idus: >1000 mg/L; 48H; LC50 Daphnia: Daphnia: 168 mg/L; 24H; EC50 Bacteria: Phytobacterium phosphoreum: 26 mg/L; 5M; EC50 No data available.

**Environmental:** No information available.

**Physical:** No information available.

**Other:** Do not empty into drains. Readily biodegradable.

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**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.

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**Section 14 - Transport Information**

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
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</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>TOXIC SOLID, ORGANIC, N.O.S.</td>
<td>TOXIC SOLID, ORGANIC, N.O.S.</td>
</tr>
</tbody>
</table>
Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 50-78-2 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.

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# 50-78-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains Acetylsalicylic acid, a chemical known to the state of California to cause female reproductive toxicity.
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
Risk Phrases:
R 25 Toxic if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**
- **S 26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **S 37/39** Wear suitable 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).

**WGK (Water Danger/Protection)**
- **CAS# 50-78-2: 1**

**Canada - DSL/NDSL**
- **CAS# 50-78-2** is listed on Canada's DSL List.

**Canada - WHMIS**
- This product has a WHMIS classification of D1B, 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**

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**Section 16 - Additional Information**

**MSDS Creation Date:** 12/12/1997  
**Revision #11 Date:** 2/08/2008

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