Material Safety Data Sheet
Arsenic trichloride

ACC# 93329

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Arsenic trichloride  
**Catalog Numbers:** AC401460000, AC401461000  
**Synonyms:**  
**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>7784-34-1</td>
<td>Arsenic trichloride</td>
<td>98</td>
<td>232-059-5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Not available.  
**Target Organs:** None.

**Potential Health Effects** The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

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.  
**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
**Ingestion:** Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.  
**Inhalation:** Remove from exposure and move to fresh air immediately.  
**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.

**Extinguishing Media:** Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

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

**Upper:** Not available.

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

Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

**Handling:** Not available.

**Storage:** Not available.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**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>Arsenic trichloride</td>
<td>0.01 mg/m³ TWA (as As) (listed under Arsenic, inorganic compounds).</td>
<td>5 mg/m³ IDLH (as As) (listed under Arsenic, inorganic compounds).</td>
<td>10 æg/m³ TWA (as As) (listed under Arsenic, inorganic compounds). 5 æg/m³ Action Level (as As); 10 æg/m³ TWA (as As, Cancer hazard - see 29 CFR 19 10.1018, except Arsine) (listed under Arsenic, inorganic compounds).</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Arsenic trichloride: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Not available.

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

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.
**Respirators:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

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**Section 9 - Physical and Chemical Properties**

- **Physical State:** Not available.
- **Appearance:** Not available.
- **Odor:** None reported.
- **pH:** Not available.
- **Vapor Pressure:** Not available.
- **Vapor Density:** Not available.
- **Evaporation Rate:** Not available.
- **Viscosity:** Not available.
- **Boiling Point:** Not available.
- **Freezing/Melting Point:** 0 deg C
- **Decomposition Temperature:** Not available.
- **Solubility:** Not available.
- **Specific Gravity/Density:** 2.1600g/cm³
- **Molecular Formula:** AsCl₃
- **Molecular Weight:** 181.28

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**Section 10 - Stability and Reactivity**

- **Chemical Stability:** Stable under normal temperatures and pressures.
- **Conditions to Avoid:** Not available.
- **Incompatibilities with Other Materials:** Not available.
- **Hazardous Decomposition Products:** Hydrogen chloride.
- **Hazardous Polymerization:** Has not been reported.

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**Section 11 - Toxicological Information**

- **RTECS#:**
  - CAS# 7784-34-1: CG1750000
- **LD₅₀/LC₅₀:**
  - CAS# 7784-34-1:
    - Oral, rat: LD₅₀ = 48 mg/kg;
    - Oral, rat: LD₅₀ = 48 mg/kg;
    - Skin, rat: LD₅₀ = 80 mg/kg;

- **Carcinogenicity:**
  - **ACGIH:** A1 - Confirmed Human Carcinogen (listed as 'Arsenic, inorganic compounds').
  - **California:** carcinogen, initial date 2/27/87 (listed as Arsenic, inorganic compounds).
- **NTP:** Known carcinogen (listed as Arsenic, inorganic compounds).
- **IARC:** Group 1 carcinogen (listed as Arsenic compounds, n.o.s.).

**Epidemiology:** No information available.
**Teratogenicity:** No information available.
**Reproductive Effects:** No information available.
**Mutagenicity:** No information available.
**Neurotoxicity:** No information available.
**Other Studies:**

### Section 12 - Ecological Information

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>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>ARSENIC TRICHLORIDE</td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td>UN1560</td>
<td></td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
<td>I</td>
<td></td>
</tr>
</tbody>
</table>

### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**
- CAS# 7784-34-1 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# 7784-34-1: 1 lb final RQ; 0.454 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**

CAS# 7784-34-1: 500 lb TPQ

**SARA Codes**

CAS # 7784-34-1: immediate, delayed, sudden release of pressure.

**Section 313**

This material contains Arsenic trichloride (listed as Arsenic, inorganic compounds), 98%, (CAS# 7784-34-1) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**Clean Air Act:**

CAS# 7784-34-1 (listed as Arsenic, inorganic compounds) is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

CAS# 7784-34-1 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA. CAS# 7784-34-1 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# 7784-34-1 can be found on the following state right to know lists: California, (listed as Arsenic compounds, n.o.s.), New Jersey, Pennsylvania, Minnesota, (listed as Arsenic, inorganic compounds), 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 Arsenic trichloride, listed as `Arsenic, inorganic compounds', a chemical known to the state of California to cause cancer.

**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 23/25 Toxic by inhalation and if swallowed.

**Safety Phrases:**

- S 1/2 Keep locked up and out of reach of children.
- S 20 When using do not eat or drink.
- S 21 When using do not smoke.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 28A After contact with skin, wash immediately with plenty of water.

**WGK (Water Danger/Protection)**

CAS# 7784-34-1: No information available.

**Canada - DSL/NDSL**

CAS# 7784-34-1 is listed on Canada's DSL List.
Canada - WHMIS
not available.
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# 7784-34-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 8/24/1997
Revision #5 Date: 3/25/2008

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.