ALASKA TOP HAZARDOUS AIR POLLUTANTS

CHLOROMETHYL METHYL ETHER

Class A Carcinogen

The inventory method and available data do not indicate emissions occurring in the three inventoried communities. However, this does not mean there are no emissions of this pollutant in the state.

Inhalation Unit Risk Estimate for Cancer

- Chloromethyl Methyl Ether - An inhalation unit risk estimate is not available. However, chloromethyl methyl ether is a known cause of lung cancer in people.

Inventory Estimates for Chloromethyl Methyl Ether

<table>
<thead>
<tr>
<th>Community</th>
<th>Ranking by Mass</th>
<th>Total Emitted (tons per year)</th>
<th>Top Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage*</td>
<td>n/a</td>
<td>---</td>
<td>n/a</td>
</tr>
<tr>
<td>Fairbanks*</td>
<td>n/a</td>
<td>---</td>
<td>n/a</td>
</tr>
<tr>
<td>Juneau*</td>
<td>n/a</td>
<td>---</td>
<td>n/a</td>
</tr>
<tr>
<td>Total of 3 Communities</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* No data to indicate emissions

Chloromethyl Methyl Ether Sources* Expected in Alaska

* No data to indicate emissions

Potential Occupational Exposure to Chloromethyl Methyl Ether

- Chloromethyl methyl ether is used in the synthesis of chloromethylated compounds and as an alkylating agent and solvent used in the manufacture of water repellents, ion-exchange resins, and industrial polymers. Most industrial operations involving chloromethyl methyl ether are carried out in closed process vessels so that occupational exposure is minimized.

Chloromethyl Methyl Ether Emission Inventory* Improvements

* No data to indicate emissions
Chloromethyl Methyl Ether Health Effects

There is not enough data to ascertain specific effects from specific exposure concentrations. Studies indicate the following: Vapor exposures around 100 ppm are irritating to the eyes and nose. If exposure to this levels occurs over many hours, lungs may fill with fluid, causing death. Short term occupational exposures led to symptoms from difficulty breathing to sore throat, fever, and chills.

Cancer ranking: The EPA classifies chloromethyl methyl ether as a Group A carcinogen for lung cancer. Group A carcinogens are considered known human carcinogens, like cigarette smoke. An inhalation unit risk estimate is not available at this time.