

# 1,1-DIMETHYL HYDRAZINE

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## Minimum Risk Level

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.

### Minimum Risk Level

- 1,1-Dimethyl Hydrazine - 0.0005 mg/m<sup>3</sup> (0.0002 ppm) for liver effects - rats

### Inventory Estimates of 1,1-Dimethyl Hydrazine

Community	Ranking by Mass	Total Emitted (tons per year)	Top Sources
Anchorage*	n/a	---	n/a
Fairbanks*	n/a	---	n/a
Juneau*	n/a	---	n/a
Total of 3 Communities		---	

\* No data to indicate emissions

### 1,1-Dimethyl Hydrazine Sources Expected\* in Alaska

\* No data to indicate emissions

### Potential Occupational Exposure to 1,1-Dimethyl Hydrazine

hydrazine production	rocket and spacecraft propellant production	pesticide production
pharmaceutical production	photography chemicals	
boiler water treatment	textile dyes	

### 1,1-Dimethyl Hydrazine Emission Inventory\* Improvements

\* No data to indicate emissions

### 1,1-Dimethyl Hydrazine Health Effects

There is not a lot of data correlating air concentrations to specific health effects. Accidental, occupational exposures led to difficulty in breathing followed by nausea and vomiting. At sufficient concentrations, hydrazine is corrosive and irritating to the skin, eyes, and mucous membranes. Acute exposure can also damage the liver, kidneys, and the central nervous system in humans. Little information is available for long term, low concentration exposures to people. Long term, low concentration exposures to animals indicate effects on the respiratory system, liver, spleen, and thyroid.

**Cancer ranking:** EPA has classified hydrazine as a Group B2, probable human carcinogen. There is not adequate human evidence of cancer from exposures. However, inhalation studies on rats found exposure led to tumors in the nose.

## **ALASKA TOP HAZARDOUS AIR POLLUTANTS**

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