



Use of MT-31 and MT-31-1 Prohibited Under EPA's Significant New Alternatives Policy (SNAP) Program

What are MT-31 and MT-31-1?

These products are refrigerant blends that were designed for a variety of commercial and residential uses:

- chillers
- vending machines
- ice machines
- air conditioners

MT-31 was deemed acceptable as a substitute for CFC-12 (and HCFC-22) by EPA's Significant New Alternatives Policy (SNAP) Program on June 3, 1997. Since that date, EPA has become aware of potentially adverse health risks from overexposure to a chemical contained in MT-31 and MT-31-1.

Why is EPA regulating substitute refrigerants?

The purpose of the SNAP Program is to review alternatives to ozone depleting substances (ODSs). EPA only lists as acceptable those alternatives that pose minimal risks of adverse effects to human health or the environment compared to other substitutes and to the ODSs being replaced. After EPA's initial decision on MT-31, health concerns related to human exposure to MT-31 and MT-31-1 came to our attention. Because of potential health risks, EPA issued regulations in January 1999 that prohibit the use of MT-31 and MT-31-1 as substitutes for CFC-12 and HCFC-22 in air conditioning and refrigeration systems.

What are the health risks?

Laboratory rats exposed to a primary ingredient of MT-31 and MT-31-1 developed abnormal cell growth in their kidneys. These results indicate potential risk of kidney malfunction or other disease in humans exposed to the same chemical. The manufacturer has claimed that the chemical composition is confidential. Therefore, at this time EPA cannot identify the harmful ingredient.

Who needs to be concerned?

Anyone working with these refrigerants, especially those who are exposed to MT-31 or MT-31-1 during refrigeration and air-conditioning equipment manufacture and/or servicing, needs to take appropriate precautions to minimize his/her exposure.

How do I safely handle MT-31 and MT-31-1?

For safe handling of these products, industry standards recommend that exposure not exceed **2 parts per million (ppm)** as an eight-hour time weighted average, and disposal in a well-ventilated area. Industrial guidelines also recommend the use of self-contained breathing apparatus and Neoprene gloves when removing MT-31 and MT-31-1. Procedures for proper recovery of all refrigerants are discussed in previous EPA regulations. These regulations are discussed in the fact sheet "Complying with Section 608 Refrigerant Recycling Rule," available through the hotline number below or on the world wide web site at www.epa.gov/ozone/title6/608/608fact.html. Please call the hotline number below if you need further assistance in evacuating MT-31 and MT-31-1.

What refrigerants should I use instead?

There are many acceptable CFC-12 and HCFC-22 refrigerant alternatives with various applications in a variety of end-uses. We recommend you refer to SNAP listings, available from EPA's web site or from the Stratospheric Ozone Information Hotline, for appropriate alternatives to MT-31 and MT-31-1.

Is the use of MT-31 and MT-31-1 legal?

With the publication of EPA's regulations in the Federal Register, it will be illegal to use MT-31 and MT-31-1 as substitutes for CFC-12 and HCFC-22 in refrigeration and air conditioning systems. If you are currently using either of these refrigerants, you should safely remove them from use and dispose of them in a safe and environmentally responsible manner. Although discarded MT-31 and MT-31-1 are not considered a hazardous waste under the Resource Conservation and Recovery Act (RCRA), EPA suggests that these chemicals be handled in a manner similar to a hazardous waste because of toxicity concerns. State and local regulations may apply.

For more information contact:

- The Stratospheric Ozone Information Hotline at (800) 296-1996
- The Stratospheric Protection Web Site at www.epa.gov/ozone/title6/snap