

Information Bulletin: Counterfeit Refrigerants

December 2025



What You Need to Know

Environment and Climate Change Canada (ECCC) is warning heating ventilation and air conditioning (HVAC) technicians and service providers, as well as refrigerant importers that cylinders containing **counterfeit refrigerants falsely labelled as R-410A** have been found in Canada (see Figures 1 and 2).

These cylinders **contain a mixture of R-40 (methyl chloride, or chloromethane) and hydrofluorocarbons (HFCs), instead of the expected R-410A blend.** R-40 should not be used as a replacement for R-410A refrigerant as it poses serious risks to human health and equipment safety.

- R-40 is used to counterfeit refrigerants because it is cheaper to produce than HFCs and its behaviour in HVAC systems can resemble genuine refrigerants.
- Brief exposure to high concentrations of R-40 via inhalation can have significant effects on human health, specifically, the nervous and reproductive systems.
- R-40 is also extremely flammable and corrosive to aluminum and plastics. R-40 can react with the aluminum inside HVAC systems to generate highly reactive and toxic compounds, and exposure of the system's contents to air or moisture (e.g. via servicing) could result in production of a strong acid and explosive chemical reactions.
- Counterfeit refrigerants can also cause a variety of issues that may range from increasing energy use and decreasing cooling performance, to significantly reducing the operating life of equipment, voiding warranties and even equipment failures.
- All imports of bulk HFC refrigerants into Canada require an authorization issued under the [Ozone-depleting Substances and Halocarbon Alternatives Regulations](#) (ODSHAR) and must be stored in a refillable container.

Figure 1. Counterfeit refrigerants falsely labelled as R-410A found in Canada – Package



Source: Environment and Climate Change Canada, Enforcement Branch

Figure 2. Counterfeit refrigerants falsely labelled as R-410A found in Canada – Cylinders



Source: Environment and Climate Change Canada, Enforcement Branch

How to Help Detect Counterfeit Refrigerants

- Generic and/or unusual labeling, logos or seals, inconsistent text and font type or misspellings on the product packaging.
- Packaging that does not include the manufacturer's name and/or logo, or safety warnings and instructions that match the refrigerant type.
- The advertised price is significantly below average market value, or the supplier is relatively unknown (e.g. limited information available online).
- Non-refillable cylinders or cylinders with different valve types or colours than standard HFC refrigerant cylinders.

Steps to Avoid Counterfeit Refrigerants

- Ensure your supply chain is accountable and only purchase refrigerants from authorized distributors. All imports of HFC refrigerants into Canada must be authorized by ECCC and stored in refillable containers.
- Some manufacturers use special labels, markings or tamper resistant packaging to assist customers in determining if materials are genuine and some also offer tools (e.g. websites, phone numbers, QR codes etc.) to assist with verification.
- Compare the information on packaging (e.g. refrigerant type, purity level and net weight etc.) with the manufacturer's published specifications.
- Visually inspect every refrigerant package and cylinder for misspelling, font inconsistencies, missing labels or markings, incorrect valves, or other obvious changes from previous shipments.
- Verify the refrigerant contained in HVAC systems, for example, by using a portable infrared analyzer and/or halide torch testing, prior to repairing or servicing equipment.

Report Counterfeit Refrigerants

If you suspect counterfeit refrigerants in circulation, **do not use them** and please contact ECCC. We are available to answer any questions you may have about the ODSHAR.

If ECCC enforcement officers have reason to suspect non-compliance with the ODSHAR, they will determine what enforcement action will be taken in accordance with the [Compliance and enforcement policy for the Canadian Environmental Protection Act, 1999](#).

Public Inquiries Centre
Environment and Climate Change Canada
Government of Canada
enviroinfo@ec.gc.ca
Tel: (819) 938-4228

Cat. No.: En4-786/2025E-PDF
ISBN : 978-0-660-79788-5
EC25060

For information regarding reproduction rights, please contact Environment and Climate Change Canada's Public Inquiries Centre at 1-800-668-6767 or email to enviroinfo@ec.gc.ca.

Photos: © Environment and Climate Change Canada

© His Majesty the King in Right of Canada, as represented by the Minister of Environment and Climate Change, 2025

Aussi disponible en français