

FACT SHEET

Technology Transitions Program Labeling Products and Equipment that Use Hydrofluorocarbons (HFCs): What You Need to Know

The American Innovation and Manufacturing (AIM) Act was enacted on December 27, 2020. The AIM Act provides authority for the U.S. Environmental Protection Agency (EPA) to address hydrofluorocarbons (HFCs). Specifically, the AIM Act directs EPA to facilitate the transition to next-generation technologies by restricting use of HFCs in the sectors or subsectors in which they are used.

The Technology Transitions Program requires that new products and equipment in the aerosol, foam, and refrigeration, air conditioning, and heat pump (RACHP) sectors that use or are intended to use HFCs or HFC blends must:

- Use HFCs or HFC blends that meet GWP limits for each subsector;
- Report annually to EPA on the type and quantity of HFCs used among other information;
- Label products and equipment using HFCs and HFC blends.

This fact sheet provides an overview of the labeling requirements, some of which begin January 1, 2025. Refer to 40 CFR 84.58 for full details. You should not rely on this fact sheet for purposes of compliance.

What Is the Regulatory Basis for the Labeling Requirements?

EPA's Technology Transitions Program restricts the use of certain HFCs or HFC blends in new products and equipment across various subsectors by setting maximum GWP limits or listing specific HFCs or HFC blends that are restricted. These limits and the compliance dates vary by sector or subsector. All new affected products, systems, and specified components that use or are intended for use with HFCs after the applicable compliance date must be labeled.

About HFCs

HFCs are potent greenhouse gases (GHGs) developed and manufactured as replacements for ozone-depleting substances (ODS) in refrigeration, air conditioning, aerosols, fire suppression, and foam blowing. These fluorinated chemicals have no known natural sources. They have global warming potentials (GWPs) (a measure of the relative climatic impact of a GHG) that can be hundreds to thousands of times greater than carbon dioxide (CO₂).

Who Is Responsible for Complying with Labeling Requirements?

- Manufacturers and importers of products and equipment using HFCs are principally responsible for complying with the labeling requirements.
- Retailers and distributors are also responsible for ensuring the products they sell or distribute comply with the labeling requirements and with online commerce (eCommerce) labeling requirements if their products are available for purchase or distribution online.
- Air conditioning and refrigeration equipment installers are responsible for ensuring that the label indicates the correct refrigerant and the time of first charge.

When Do the Labeling Requirements Start?

The labeling requirement takes effect for each subsector at the same time as the GWP limit. Generally, these are:

- January 1, 2025 – Foams, consumer aerosols, many self-contained RACHP products, and residential air conditioning and heat pump systems
- January 1, 2026 – Chillers, industrial process refrigeration, and cold storage warehouses
- January 1, 2027 – Specialty RACHP applications, including data centers, refrigerated food processing and dispensing equipment*
- January 1, 2028 – Additional RACHP applications and technical aerosols*

*A complete list of the effective dates for each subsector can be found here:

<https://www.epa.gov/climate-hfcs-reduction/technology-transitions-hfc-restrictions-sector>.

What Information Needs to Be on the Label?

Labels in all sectors subject to the Technology Transition Program must include:

- The name or designation of the HFC(s) or HFC blend.
 - For example, “HFC-134a” or “1,1,1,2-Tetrafluoroethane” are both acceptable. An ASHRAE designation such as “R-134a” or “R-410A” is also acceptable. A trade name that does not specifically identify the HFC(s) is not acceptable.
- The date of manufacture (at a minimum, the four-digit year).

Additional information may be needed depending on the subsector or type of product (detailed below). The GWP for the HFCs or HFC blends are **not** required to be on the label.

Label Example: Household Refrigerator

HOUSEHOLD REFRIGERATOR	
MODEL:	ABC123
SER. No:	123456789
RATING	115V ~ 60HZ 3.1A
DEFROSTING INPUT	350W
POWER INPUT OF ICEMAKER HEATER	
REFRIGERANT	HFC-152a 1.9oz
DIMENSIONS	36 2/4 (W) x 30 1/3(D) x 68 2/4 inch
PRODUCTION DATE	2025.6

HFC Designation

Date of Manufacture

**Examples are provided for illustrative purposes only. Regulated entities are not required to use these specific label designs.*

Formatting Requirements

The label must be:

- Permanent
- In English
- Durable and printed or otherwise labeled on, or affixed to, an external surface of the product
- Readily visible and legible
- Able to withstand open weather exposure
- Displayed on a background of contrasting color

Additional Labeling Options

In lieu of a label as described above, EPA allows for the following alternatives:

- Providing the required information in packaging materials (e.g., tag, pamphlet, or box) that is present with the product or equipment throughout the distribution chain.
- Providing the required information through an on-product QR code that directs to the required information and meets all the requirements of an on-product label. The QR code must include adjacent visible and legible text to indicate the purpose of the QR code.

Online Labeling Requirements

For products sold or distributed electronically through online commerce (eCommerce), the label must be readily visible and legible in either photographs of the product, photographs of packaging materials that contain the required information, or an item description that contains the required information.

Aerosol Sector – Additional Labeling Requirements

- For aerosol products the label must identify all the HFCs used in the product.
- If multiple HFCs are used, or an HFC with a GWP greater than the limit is used (e.g., HFC-134a), the label must include either
 - (1) the weights of the HFC(s) relative to the other propellants, solvents, or to the other HFCs, or
 - (2) the specific text “GWP <150”

Label Example: Aerosol Spray Deodorant

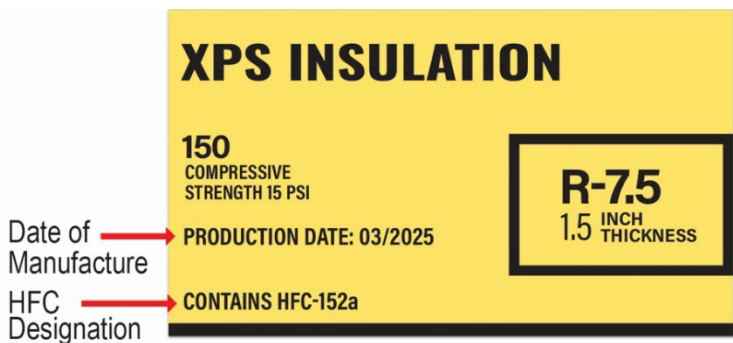
Drug Facts	Product Date: 9/2025	Date of Manufacture
Active ingredient	Purpose	
Aluminum Chlorohydrate	antiperspirant	
Uses	Reduces underarm wetness	
Warnings	For external use only	
Directions	Apply to underarms only	
Inactive ingredients	HFC-152a	HFC Designation

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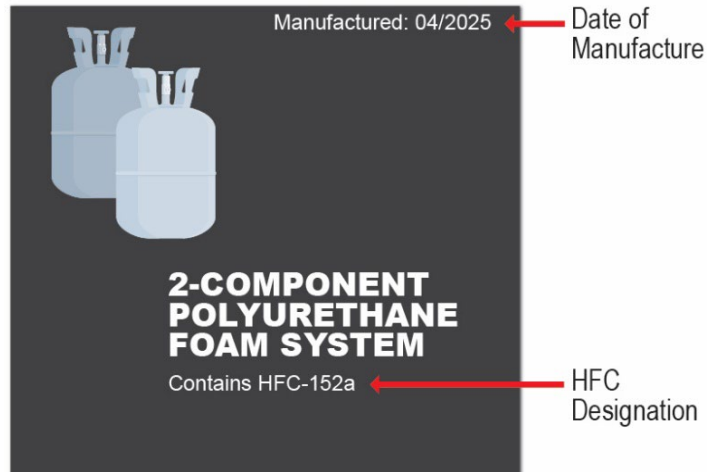
Foam Sector – Additional Labeling Requirements

- For foam products the label must identify all the HFCs used in the product.
- If multiple HFCs are used, or an HFC with a GWP greater than the limit is used, the label must include either
 - (1) the weights of the HFC(s) relative to the other blowing agents, or to the other HFCs, or
 - (2) the specific text “GWP <150”

Label Example: Two-component Polyurethane Foam System



Label Example: XPS Boardstock



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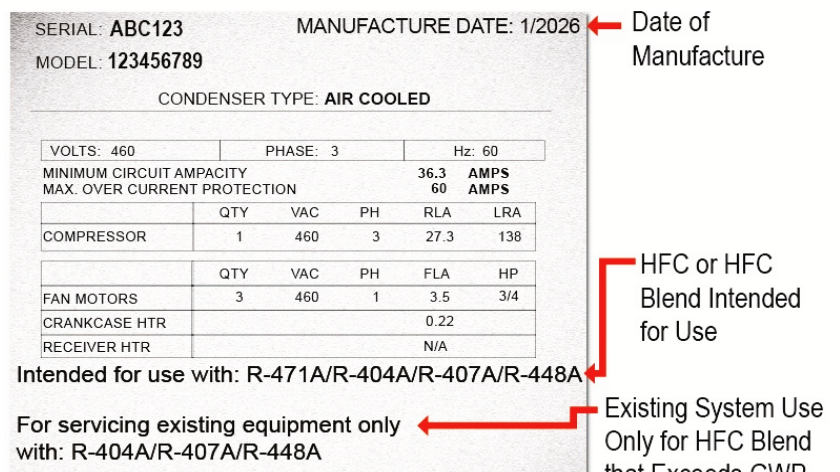
RACHP Sector – Additional Labeling Requirements

Specified Components

Specified components, which are condensing units, condensers, compressors, evaporator units, and evaporators that use or are intended to use HFCs must be labeled:

- These specified components must be labeled regardless of whether the components are filled or unfilled, to indicate the HFC(s) or HFC blend(s) intended for use in the equipment.

Label Example: Commercial Refrigeration Condensing Unit for Use in Existing Equipment Only



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- If the specified components are intended for servicing existing equipment with high-GWP HFC(s) or HFC blend(s), the label must also state “For servicing existing equipment only” for any HFC above the GWP limit.

RACHP Systems

Field-assembled equipment must be labeled at the time of first charge to indicate:

- (1) the HFC or HFC blend being used and
- (2) the date of first charge (at a minimum, the four-digit year).

New labels added at the time of first charge must be affixed near but not covering the original specified component label(s).

Label Example: Heat Pump Outdoor Unit with Specific Component Label and Field-assembled Label

MODEL ABC123	MANUFACTURE DATE: 8/2026		← Date of Manufacture
	SERVICE REF. 123456789		
UNIT SUPPLY	VOLTS 208/230	PHASE Hz 1 60	
FAN MOTOR	FLA 12	W(OUTPUT) 14	
COMPRESSOR	R.L.A. 12	L.R.A. 14	
REFRIGERANT	R-32		← HFC or HFC Blend Intended for Use
FACTORY CHARGED	4 LBS. 12 OZ.		
INSTALLER TO MARK: TOTAL CHARGE	4 LBS. 7 OZ.		

INITIAL CHARGE ADDED: 8/2026	← Date of First Charge
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Additional Subsector-specific Requirements

- Some subsectors have restrictions that change based on certain equipment specification, such as charge size. For these subsectors, additional information such as the charge capacity is required on the labels. The charge size must be added to a label on the system no later than the date of first charge. The label may either be the specific charge size of the system or the charge size as it relates to the threshold of the related subsector. For example, the charge size for a supermarket could be labeled as “Charge 150 lbs” or “Charge < 200 lbs”. This requirement applies to the following subsectors:
 - Industrial process refrigeration (without chillers)
 - Cold storage warehouses
 - Retail food refrigeration — supermarket systems
 - Retail food refrigeration — remote condensing units
 - Retail food refrigeration — remote refrigerated food processing and dispensing equipment
- Labels for self-contained automatic commercial ice machines must include the specific harvest rate or the harvest rate as it relates to the relevant threshold. It must also identify whether the ice machine is a batch or continuous operation type.
- Labels for industrial process refrigeration chillers must include the designed exiting fluid temperature range.

- Labels for industrial process refrigeration systems without chillers must include the designed refrigerant temperature range when it enters the evaporator.
- For products in the motor vehicle air conditioning (MVAC) subsectors, the label may include either the model year or the date of manufacture (at a minimum, the four-digit year).

The Labels I Currently Use Contain All Required Information. Do I Still Need to Create a New Label?

Existing labels that contain all required information and meet necessary formatting conditions are acceptable. This rule does not require the creation or use of a standardized label format or graphic.



Additional Resources

Technology Transitions: www.epa.gov/climate-hfcs-reduction/technology-transitions

Frequently Asked Questions: www.epa.gov/climate-hfcs-reduction/frequent-questions-phasedown-hydrofluorocarbons#technology-transitions-program

40 CFR part 84 subpart B: www.ecfr.gov/current/title-40/chapter-1/subchapter-C/part-84/subpart-B

Contact EPA: HFCTransitions@epa.gov