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## FACT SHEET

# Rule 24 - Protection of Stratospheric Ozone: Listing of HFO-1234yf under the Significant New Alternatives Policy Program for Motor Vehicle Air Conditioning in Nonroad Vehicles and Servicing Fittings for Small Refrigerant Cans

## Significant New Alternatives Policy (SNAP) Program

Under section 612 of the Clean Air Act (CAA), EPA reviews substitutes in a comparative risk framework. EPA lists these substitutes as acceptable, acceptable with specific conditions on use, acceptable for certain narrowed uses, or unacceptable (prohibited) for specific uses. Section 612 requires EPA to list as acceptable those substitutes that do not present a significantly greater risk to human health and the environment as compared with other substitutes that are currently or potentially available.

As part of the evaluation of overall risk to human health and the environment, EPA considers many factors, including the flammability or toxicity of a substitute, worker and consumer exposure, and environmental risks such as impacts on the ecosystem, local air quality, ozone layer, and on the climate system.

## Rule 24

This rule lists a new, lower-global warming potential (GWP) alternative for the motor vehicle air conditioning (MVAC) end-use for certain newly manufactured nonroad (also called off-road) vehicles, and make other minor changes to align the existing listings for vehicles covered in previous final rules. Specifically, this action:

- 1) Lists HFO-1234yf, also known as 2,3,3,3-tetrafluoro-prop-1-ene, as acceptable with certain conditions on use for MVAC systems in newly manufactured agricultural tractors with greater than 40 horsepower; self-propelled agricultural machinery; compact equipment;

## Final Rule

### *What is EPA finalizing?*

- List HFO-1234yf as acceptable with specific conditions on use for MVACs in certain nonroad vehicles
- Reference the current versions of SAE J639, SAE J1739, and SAE J2844
- Require unique servicing fittings for small refrigerant cans (two pounds or less) of HFO-1234yf used for MVAC servicing
- Add a reference to EPA's regulations under the Toxic Substances Control Act for HFO-1234yf
- Make corresponding changes to the existing listings for certain vehicles covered in final rules issued in March 2011 and December 2016

### *Which industrial end-use is included?*

- Motor vehicle air conditioning

### *Who would be affected?*

- Do-It-Yourself mechanics and motor vehicle technicians
- Nonroad equipment manufacturers






### *When is the rule effective?*

- 30 days after the final rule publishes in the *Federal Register*

construction, forestry, and mining equipment; and commercial utility vehicles (see below for examples of the nonroad vehicles covered in the proposed rule).

- 2) References the current versions of three technical safety standards (i.e., SAE J639 (revised November 2020), SAE J1739 (revised January 2021), and SAE J2844 (revised January 2013)) in the relevant use conditions, replacing earlier editions of these standards.
- 3) Requires unique servicing fittings for small cans (two pounds or less) of HFO-1234yf that are used to service MVAC systems in the five types of nonroad vehicles.
- 4) References EPA’s Significant New Use Rule (SNUR) for HFO-1234yf under the Toxic Substances Control Act (TSCA) (80 FR 37166, June 30, 2015) in the listing table. The SNUR requires that commercial users or consumers only recharge MVAC systems with HFO-1234yf if the original equipment manufacturer initially charged the system with HFO-1234yf.
- 5) Makes corresponding changes to the existing listings for HFO-1234yf for certain vehicles covered in final rules issued in March 2011<sup>1</sup> and December 2016,<sup>2</sup> including modifying the use conditions to reference the current versions of SAE J639, SAE J1739, and SAE J2844, requiring unique servicing fittings for small cans (two pounds or less) of HFO-1234yf used for MVAC servicing, and referencing the 2015 SNUR for HFO-1234yf.

## Examples of Nonroad Vehicles Covered in Rule 24

Machine Form	Equipment Examples	Equipment Details	Examples
#1	Agricultural Tractors	Tractors >40 HP, including 2WD, MFD, 4WD, and Tracks	
#2	Self-Propelled Agricultural Machinery	Combine, Sprayer, Forage, Harvester, Windrower, Floater	
#3	Compact and Turf Equipment	Tractors <40 HP, Compact Equipment, and Turf Equipment	
#4	Construction, Forestry, and Mining Equipment	Examples include but are not limited to: Excavators, Dozers, Wheel Loaders, Loader Backhoes, Feller Buncher, Log Skidder, Road Grader, Articulated Trucks, Loaders, Sub-surface Machines, Horizontal Directional Drill, Trenchers	
#5	Utility Vehicles	Commercial Use Utility Vehicles	

<sup>1</sup> EPA previously listed HFO-1234yf as acceptable, subject to use conditions, in new light-duty passenger cars and trucks (76 FR 17488; March 29, 2011).

<sup>2</sup> EPA previously listed HFO-1234yf as acceptable, subject to use conditions, in new medium-duty passenger vehicles, heavy-duty (HD) pick-up trucks, and complete HD vans (81 FR 86778; December 1, 2016).