



April 23, 2021

FACT SHEET

Final Rule 23 - Protection of Stratospheric Ozone: New Listings for the Significant New Alternatives Policy Program in the Refrigeration & Air Conditioning Sector and Revised Listing in the Fire Suppression and Explosion Protection Sector

Significant New Alternatives Policy 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 subject to use conditions, acceptable subject to narrowed use limits, 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 criteria, including the flammability or toxicity of a substitute, as well as environmental risks such as ecosystem impacts, local air quality, or impacts on the global atmosphere.

Today's Action

Under this final rule, a number of substances are listed as acceptable, subject to use conditions or acceptable, with

Final Rule

What is in the Final Rule?

- Lists several substances as acceptable subject to use conditions or acceptable subject to narrowed use limits
- Clarifies status of acceptable fire suppression alternative

Which industrial sectors are included?

- Refrigeration & Air Conditioning
- Fire Suppression & Explosion Protection

Who is affected?

- Chemical producers
- Air conditioning and refrigeration equipment manufacturers
- Some end users of equipment and products using refrigerants or fire suppressants

narrowed use conditions, in the refrigeration and air conditioning sector. This action also removes an acceptable subject to use conditions listing for the fire suppression sector where EPA has more recently listed the substitute as acceptable with no use restrictions. Consistent with CAA section 612 as it has historically been interpreted under the SNAP program, EPA is issuing these listings and modifications based on evaluation of the substitutes addressed in this action using the SNAP criteria for review and considering other available and potentially available substitutes.

Summary of Final Rule

ACCEPTABLE ALTERNATIVES, WITH USE CONDITIONS

End-Use	Substitutes	Decision		
Refrigeration & Air Conditioning				
Residential and light commercial air conditioning and heat pumps (New)	R-452B, R-454A, R-454B, R-454C, R-457A	Acceptable Subject to Use Conditions*		
Residential and light commercial air conditioning and heat pumps (New), excluding self-contained room air conditioners [†]	R-32	Acceptable Subject to Use Conditions*		

* For specific use conditions for substitutes listed as Acceptable Subject to Use Conditions, consult the Final Rule.

+ EPA previously listed R-32 as Acceptable Subject to Use Conditions for self-contained room air conditioners (April 10, 2015; 80 FR 19454)

ACCEPTABLE ALTERNATIVES, WITH NARROWED USE LIMITS

End-Use	Substitutes	Decision	Narrowed Use Limits	Further Information
Refrigeration & Air Conditioning				
Retail food refrigeration – medium- temperature stand-alone units (New)	R-448A, R-449A, R-449B	Acceptable Subject to Narrowed Use Limits	Acceptable only for use in new medium-temperature stand-alone units where reasonable efforts have been made to ascertain that other alternatives are not technically feasible	A possible reason for rejection of one or more other alternative(s) could be based on ADA requirements.

OTHER CHANGES

End-Use	Change		
Fire Suppression and Explosion Protection			
Total Flooding	Clarify that Powdered Aerosol E (FirePro [™]) is listed as acceptable for use in both occupied and unoccupied spaces		