



December 11, 2020

FACT SHEET

Protection of Stratospheric Ozone: Determination 36 for Significant New Alternatives Policy Program

Action Listing New Acceptable Substitutes

Section 612 of the Clean Air Act requires EPA to evaluate alternatives to ozone-depleting substances. EPA's Significant New Alternatives Policy (SNAP) program reviews substitutes in a comparative risk framework, using the same risk criteria for all SNAP decisions. 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.

This determination of acceptability (Notice 36) expands EPA's SNAP list of acceptable substitutes, providing industry with more options in the refrigeration and air conditioning, foam blowing, and fire suppression sectors.

Notice 36

What is included in the Notice?

• Six additional acceptable substitutes that reduce overall risk to human health and environment

Which industrial sectors are included?

- Refrigeration & Air Conditioning
- Foam Blowing
- Fire Suppression

What health and environmental impacts of substitutes does EPA evaluate?

 Atmospheric effects, toxicity, flammability, occupational and consumer health/safety, local air quality, and ecosystem effects

Sector	End-Use	Substitutes
Refrigeration & Air Conditioning	Industrial Process Refrigeration (New & Retrofit)	HCFO-1233zd(E)
	Centrifugal Chillers (New) Positive Displacement Chillers (New) Industrial Process Air Conditioning (New)	R-515B
Foam Blowing	Polystyrene: extruded boardstock and billet	HFO-1336mzz(Z)/HFC-152a blends
	Flexible Polyurethane Integral Skin Polyurethane Rigid Polyurethane and Polyisocyanurate Laminated Boardstock Rigid Polyurethane Appliance Rigid Polyurethane Commercial Refrigeration Rigid Polyurethane Sandwich Panels Rigid Polyurethane Slabstock and other	HFO-1336mzz(E)
	Rigid Polyurethane Spray Foam (HP 2- component, LP 2-component, one-component)	HFO-1336mzz(E), Methylal
Fire Suppression	Total flooding (normally occupied and unoccupied spaces)	HCFO-1233zd(E)/C6-perfluoroketone blend

SUMMARY OF ACCEPTABLE SUBSTITUTES