



EPA's Final Rule, July 20, 2015, and September 26, 2016 Changed listing status of certain HFCs*

Phase-out refrigerant	Final Rule: July 20, 2015								Final Rule: September 26, 2016				
	Supermarket (New**)	Supermarket (Retrofit***)	Remote condensing unit (New)	Remote condensing unit (Retrofit***)	Stand-Alone				Refrigerated food processing and dispensing equipment (New)	Cold storage warehouses (New)	Ice machines (New)	Very low-temp refrigeration (New)	
					MT < 2,200 BTU/hr. and not contain flooded evap. (New)	MT ≥ 2,200 BTU/hr. with or without flooded evap. (New)	LT (New)	LT and MT (Retrofit***)					
R-404A/507A	Jan. 1, 2017	July 20, 2016	Jan. 1, 2018	July 20, 2016	Jan. 1, 2019	Jan. 1, 2020	Jan. 1, 2020	July 20, 2016	Jan. 1, 2021	^Jan. 1, 2023	OK	OK	
R-410A	OK	-	OK	-	Jan. 1, 2019	Jan. 1, 2020	Jan. 1, 2020	-	Jan. 1, 2021	^Jan. 1, 2023	OK	OK	
R-407A/C/F	OK	OK	OK	OK	Jan. 1, 2019	Jan. 1, 2020	Jan. 1, 2020	OK	^Jan. 1, 2021	R-407C/F OK R-407A: ^Jan. 1, 2023	OK	R-407C only	
HFC-134a	OK	OK	OK	OK	Jan. 1, 2019	Jan. 1, 2020	OK	OK	OK	OK	OK	-	
Likely alternatives (Emerson perspective)													
R-448A/449A	OK	OK	OK	OK	Neither SNAP- approved, nor banned	Neither SNAP- approved, nor banned	OK	OK for LT only	-	-	OK	-	
R-450A/513A	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	-	
R-290	-	-	-	-	OK	OK	OK	-	-	-	OK	OK	
R-744	OK	-	OK	-	OK	OK	OK	-	OK	OK	-	OK	
R-717	OK (in primary loop of secondary system)	-	OK (In primary loop of secondary system)	-	OK (in primary loop of secondary system)	OK (in primary loop of secondary system)	OK (in primary loop of secondary system)	OK (in primary loop of secondary system)	OK (in primary loop of secondary system)	OK (in primary loop of secondary system)	OK	OK	-

** Includes ice machines connected to a supermarket rack refrigeration system.

*** EPA uses term "retrofit" to indicate the use of a refrigerant in an appliance that was designed for and originally operated using a different refrigerant. Term does not apply to upgrades to existing equipment where the refrigerant is not changed.

*Abbreviated – For complete listing, see EPA Final Rule; go to: <https://www.gpo.gov/fdsys/pkg/FR-2015-07-20/pdf/2015-17066.pdf>
See proposed rule; go to: <https://www.gpo.gov/fdsys/pkg/FR-2016-04-18/pdf/2016-08163.pdf>