

Refrigeration oil selection guide for industrial systems.

Refrigerant		Evaporation temperature		Compressor type						
ASHRAE name	Type	from (°C)	to (°C)	Piston (viscosity grade)			Screw (viscosity grade)		Centrifugal (viscosity grade)	
R12	CFC	-40	+40	32/46					100	
R502	CFC	-50	-20	32/46 ▲	32/46 P		68/100 ▲	68/100 P		
R22	HCFC	-50	+10	32/46 ▲	32/46 P		68 ▲	68/100 P	68 ▲	68
R401A	HCFC	-20	+10	32/46			100		68	
R402A	HCFC	-50	-30	32			100			
R408A	HCFC	-50	-30	32			100			
R409A	HCFC	-20	+10	32/46			100			
R290	Propane	-30	+20	68	68 P	80 P	*	* P	*	* P
R1270	Propylene	-30	+20	68	68 P	80 P	*	* P	*	* P
R600	Butane	-30	+20	68	68 P	80 P	*	* P	*	* P
R600a	Isobutane	-30	+20	68	68 P	80 P	*	* P	*	* P
R717	NH ₃	-50	+10	68 ▲	68 P	68	46/68	46/68 P	46/68	68
R717	NH ₃ -DX	-50	+10	68 P	68		68 P	68		
R744	CO ₂ - subcritical	-50	-10	55/80 P	68			170		
R744	CO ₂ - transcritical	-50	-10	80 P	68					

RENISO SYNTH 68 / RENISO UltraCool 68 based on PAO / synthetic hydrocarbon

RENISO K series / RENISO TES 100 based on mineral oils (MO)

RENISO S/SP series based on alkyl benzenes (AB)

RENISO TRITON SE/SEZ series based on polyol esters (POE)

RENISO PG/GL/PAG based on polyalkylene glycols (PAG)

RENISO C series based on polyol ester for CO₂ (POE-C)

RENISO ACC 68 based on polyalkylene glycols for CO₂ (PAG-C)