

Type	ASHRAE	GWP *	Safety Group	MIN	POE	PAG	PVE	HYBRID	Evaporator Temperature	COMPRESSOR TYPE												Ref. Vans											
										Piston				Screw				Centrifugal				Swash Plate											
Isobutane	R600a	0	A3	✓	✓				-30 °C	3GS	4GS																						
Propylene	R1270	0	A3	✓	✓				-30 °C	3GS	4GS	5GS																					
Propane	R290	0.02	A3	✓	✓				-30 °C	3GS	4GS	5GS																					
NH ₃	R717	0	B2L	✓		✓			-30 °C	3GS	4GS	4SA	4HT		4GS	4SA	4HT																
									-40 °C	3GS	4SA			4GS	4SA																		
									-50 °C	3GS				4GS	4SA																		
CO ₂	R744	1	A1		✓	✓		✓	-50 °C	32S	46S	68S	32	46																			
HCFC	R22	1960	A1	✓					-25 °C	3GS	4GS				4GS	5GS																	
									-35 °C	3GS	4GS			4GS																			
									-50 °C	3GS				3GS																			
HFC	R23	14600	A1		✓				-100 °C	32S	46S	68S																					
	R32	771	A2L		✓		✓	✓	-25 °C	32S	46S	68S	32	46		68S	100S																
	R134a	1530	A1		✓	✓		✓	-20 °C	32S	46S	68S	32	46	68S	100S	170T	220T	68S	100S	170T	220T	68SP	68S									
									-40 °C	32S	46S	32	46	68S	100S			68S	100S	170T	220T	68SP	68S										
	R245fa	962	B1		✓			✓	-20 °C	32S	46S	68S	32	46	68S	100S	170T	220T	68S	100S	170T	220T											
	R404A	4728	A1		✓		✓	✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T					68SP	68S									
	R407C	1908	A1		✓		✓	✓	-30 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R407H	1615	A1		✓		✓	✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R410A	2256	A1		✓		✓	✓	-25 °C	32S	32				68S	100S	170T	220T					68SP	68S									
									-45 °C	32S	32			68S	100S	170T	220T				68SP	68S											
HFO	R507A	4775	A1		✓		✓	✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T					68SP	68S									
	R1234yf	0.501	A2L		✓	✓		✓	-20 °C	32S	46S	68S	32	46	68S	100S	170T	220T	68S	100S	170T	220T											
HCFO	R1234ze(E)	1.37	A2L		✓		✓	✓	-20 °C	32S	46S	68S	32	46	68S	100S	170T	220T	68S	100S	170T	220T											
	R1224yd(Z)	<1	A1	✓	✓		✓	✓	-20 °C						4GS	4GSD	68S		4GS	4GSD	68S												
HFC/HFO	R1233zd(E)	3.88	A1	✓	✓		✓	✓	-20 °C						4GS	4GSD	68S		4GS	4GSD	68S												
	R448A	1494	A1		✓		✓	✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
HFC/HFO	R449A	1505	A1		✓		✓	✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R452A	2292	A1		✓		✓	✓	-40 °C	32S	46S	68S	32	46	68S	100S	170T	220T					68SP	68S									
	R454A	270	A2L		✓		✓	✓	-40 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R454B	531	A2L		✓		✓	✓	-25 °C	32S	32	46			68S	100S																	
	R454C	166	A2L		✓		✓	✓	-30 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R474A	<1	A2L		✓		✓	✓	-30 °C	32S	46S	68S	32	46	68S	100S	170T	220T															
	R513A	674	A1		✓		✓	✓	-20 °C	32S	46S	68S	32		170T	220T		68S	100S	170T	220T	68SP	68S										
	HFC/HFO/CO ₂	R455A	166	A2L		✓		✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T					68SP	68S									
	HFC/HFO/HC	R465A	162	A2		✓		✓	-50 °C	32S	46S	68S	32	46	68S	100S	170T	220T					68SP	68S									
	HFC/CO ₂	R469A	1467	A1		✓		✓	-60 °C	32S	46S	68S																					
HFC/HC	R417A	2508	A1		✓		✓	-25 °C	32S	46S	68S	32	46	68S	100S	170T	220T																

* IPCC AR6

Oil Select or for Car Air Conditioning System

Apprication		P46	PB100	AC46
Vehicle Type	IC Engine	✓	✓	✓
	BEV HEV	x	x	✓
Refrigerant Type	R134a	✓	✓	✓
	R1234yf	✓	x	✓
Compressor Type	Swash Plate	✓	✓	✓
	Scrol	✓	✓	✓
	Vane	x	✓	x
	Belt Driven	✓	✓	✓
	Electrically Driven	x	x	✓



Sunice HYBRID 32
HYB Sunice HYBRID 46
Sunice AC46



MO
SUNISO 3GS
SUNISO 4GS
SUNISO 5GS
SUNISO 3GSD
SUNISO 4GSD
SUNISO 5GSD



POE
Sunice SL-10S
Sunice SL-22S
Sunice SL-32S
Sunice SL-46S
Sunice SL-68S
Sunice SL-68SP
Sunice SL-100S
Sunice SL-170T
Sunice SL-220T
Sunice SL-320T

For NH₃ Dedicate
MO
SUNISO 4SA
SUNISO 4HT

HYB: Patented Technology
MO: Mineral Oil
POE: Polyolester
PAG: Polyalkylene glycol

PAG
Sunice P46
Sunice PB100

