

Type	COMPRESSOR TYPE										Ref. Vans					
	ASHRAE	GWP	Safety Group	MIN	POE	PAG	HYBRID	Evaporator Temperature	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							
NH3	R717	0	B2L	✓	✓			-30 °C	3GS 4GS 4SA 4HT		4GS 4SA 4HT					
								-40 °C	3GS 4SA		3GS 4SA					
								-50 °C	3GS		3GS 4SA					
CO2	R744	1	A1		✓	✓	✓	-50 °C	32S 46S 68S 32 46	32S 46S 68S 32 46						
HCFC	R22	1960	A1	✓			✓	-25 °C	3GS 4GS		32 46 4GS 5GS					
								-35 °C	3GS 4GS		32 46 4GS					
								-50 °C	3GS		32 46 3GS					
HFC	R23	14600	A1		✓			-100 °C	32S 46S 68S							
	R32	771	A2L		✓	✓		-25 °C	32S 46S		32 46 68S 100S					
	R134a	1530	A1		✓	✓	✓	-40 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	R245fa	962	B1		✓	✓		-20 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R404A	4728	A1		✓	✓		-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R407C	1908	A1		✓	✓		-30 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R407H	1615	A1		✓	✓		-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R410A	2256	A1		✓	✓		-45 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R417A	2508	A1		✓	✓		-15 °C	68S 32 46 170T 220T							
	R507A	4775	A1		✓	✓		-50 °C	32S 32 46 100S 170T 220T							
HFO	R1234yf	0.501	A2L		✓	✓	✓	-20 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	R1234ze(E)	1.37	A2L		✓	✓		-20 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
HCFO	R1224yd(Z)	<1	A1	✓	✓	✓		-20 °C		32 46 4GS 4GSD 68S		46 4GS 4GSD 68S				
	R1233zd(E)	3.88	A1	✓	✓	✓		-20 °C		32 46 4GS 4GSD 68S		46 4GS 4GSD 68S				
HFC/HFO	R448A	1494	A1		✓	✓		-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R449A	1505	A1		✓	✓		-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R452A	2292	A1		✓	✓		-40 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	R454A	270	A2L		✓	✓		-40 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R454B	531	A2L		✓	✓		-25 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R454C	166	A2L		✓	✓		-30 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T						
	R513A	674	A1		✓	✓		-20 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	HFC/HFO/CO2	R455A	166	A2L		✓	✓	-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	HFC/HFO/HC	R465A	162	A2		✓	✓	-50 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T				68SP 68S 46		
	HFC/CO2	R469A	1467	A1		✓	✓	-70 °C	32S 46S 68S		68S 100S 170T 220T					
HFC/HC	R417A	2508	A1		✓	✓	-25 °C	32S 46S 68S 32 46 68S 100S 170T 220T	46 68S 100S 170T 220T							

*IPCC AR6

Oil Selector for Car Air Conditioning System

		P46	PB100	AC46
Vehicle Type	IC Engine	✓	✓	✓
	BEV/HEV	x	x	✓
Refrigerant Type	R134a	✓	✓	✓
	R1234yf	✓	x	✓
	R744	x	x	✓
Compressor Type	Swash Plate	✓	✓	✓
	Scrol	✓	✓	✓
	Vane	x	✓	*✓
	Belt Driven	✓	✓	✓
	Electrically Driven	x	x	✓

* For compressors specified to use PAG VG100, please use Sunice PB100.



HYB Sunice HYBRID 32
Sunice HYBRID 46
For Car A/C
HYB Sunice AC46



MO Sunice 3GS
Sunice 4GS
Sunice 5GS
Sunice 3GSD
Sunice 4GSD
Sunice 5GSD
For NH3
MO Sunice 4SA
Sunice 4HT

HYB: Patented Technology
MO: Mineral
POE: Polyolesters
PAG: Polyalkylene glycols



POE Sunice SL-10S
Sunice SL-22S
Sunice SL-32S
Sunice SL-46S
Sunice SL-68S
Sunice SL-100S
Sunice SL-120T
Sunice SL-170T
Sunice SL-220T
Sunice SL-320T
For Ref Vans
POE Sunice SL-68SP
For CO2 / R744
POE Sunice 55
Sunice 85
For Car A/C
PAG Sunice P46
Sunice PB100

* JSO has extensive expertise and a proven track record in refrigeration oils for R290 refrigerants, and welcomes your inquiries.

