



**Suniso 1GS oil** is a 13.1 cSt at 37.8°C (70 SUS at 100°F) oil and is widely used in domestic refrigeration compressors.

**Suniso 3GS oil** is probably the most widely used refrigeration oil in the world. It is a 33 cSt at 37.8°C (155 SUS at 100°F) product, made for carefully selected naphthentic base stocks by special refining methods. 3GS is used and by a majority of the leading compressor and equipment builders.

**Suniso 4GS oil** is a 63 cSt at 37.8°C (290 SUS at 100°F) oil corresponding in its basic characteristics, except for viscosity, to 3GS. It is made from the same types of base stocks and by similar process methods.

**Suniso 5GS oil** is a 113 cSt at 37.8°C (525 SUS at 100°F) oil. This is heavy-duty oil where higher viscosities are required.

**Suniso 160 oil** is normally used as break-in oil for refrigerator compressors. Its primary function is to reduce the possibility of any bearing seizures, particularly during initial start-up.

This product can be used prior to the normal refrigeration oil charge.

All Suniso refrigeration oils are available from Witco in bulk and 55-gallon drum quantities. For the after market and service trade, these oils are available in one gallon, 5-gallon and 55-gallon packages from many air conditioning and refrigeration service supply outlets throughout the United States.

From these grades, an oil meeting nearly all refrigeration system requirements can be found. Contact your local Witco Sales Office for details on availability.

## Suniso Refrigeration Oils

### Typical Data

Grade, Suniso		1GS	3GS	4GS	5GS	160
<b>Property</b>	<b>Method*</b>					
Viscosity, SUS/0°F	D341	2,800	18,000	92,000	184,000	-----
Viscosity, SUS/100°F	D445/D2161	70	155	290	525	155
Viscosity, SUS/210°F	D445/D2161	35	40.9	46.0	55.3	-----
Viscosity index	D2270	8	0	0	37	95
Viscosity, cSt/0°F	D341	476	4,000	20,000	40,000	-----
Viscosity, cSt/100°F	D445	13.1	33.0	62.5	113.4	-----
Viscosity, cSt/210°F	D445	2.64	4.45	6.04	8.86	-----
Flash, COC, °F	D92	280	335	355	360	400
Fire, COC, °F	D92	330	390	410	390	+10
Pour, °F	D97	-45	-40	-30	-10	-----
Floc Point, °F	ASHRAE 86	-70	-65	-55	-----	1.5
Color	D1500	1.0	1.0	1.0	2.5	32.0
Gravity, API	D4052	27	24.0	23.0	22.5	7.21
Pounds per Gallon	D4052	7.46	7.58	7.63	7.64	0.865
Specific Gravity @ 60°F	D4052	0.893	0.190	.9*16	0.918	-----
Total Acid No., mgKOH/g	D974	nil	nil	nil	nil	-----
Interfacial Tension, dynes/cm	D971	Oakland	47	45	40	-----
Water, ppm	D1533	25	25	25	25	-----
Dielectric Strength, KV	D877	>30	>30	>30	>30	-----
Copper Strip, Class 212°F, 3 hr.	D130	1	1	1	1	-----
Conradson Carbon, %	D189	trace	trace	trace	0.01	-----
Aniline Point, °F	D611	170	165	170	190	-----
Refractive Index at 20°C	D1747	1.486	1.500	1.502	1.504	-----
Aromatics, %	D2007	28	38	38	36	-----
Sealed Tube, % R-22 14 day	ASHRAE 97	0.25	0.30	0.60	-	-----