

# SUNISO & SUNICE

## REFRIGERATION OIL

### SUNISO GS series

“SUNISO GS” series are premium quality oils expressly designed for use as refrigeration compressor lubricants. They are fully compatible with various refrigerants and highly stable, thus assuring long trouble-free life and are essentially wax free.

【Applicable Refrigerants】 HCFC, HC and R717(Ammonia) Refrigerants

【Viscosity Grade】 VG32, VG56, VG100

【Package】 200 Liter Drum, 20 Liter Pail, 4 Liter×6 Metal Cans



### SUNISO 4SA / SUNISO 4HT

“SUNISO 4SA” is a specially selected naphthenic refrigeration oil formulated for use with R717(Ammonia) refrigeration system.

“SUNISO 4HT” is a highly refined paraffinic refrigeration oil formulated for R717(Ammonia) refrigeration system particularly for food processing facilities.

【Applicable Refrigerants】 R717(Ammonia) Refrigerants

【Viscosity Grade】 VG56

【Package】 200 Liter Drum, 20 Liter Pail

### SUNICE SL series

“SUNICE SL” series are synthetic refrigeration oils using polyolester(POE) as a basestock with special additives that result in excellent miscibility with HFC Refrigerants used in compressor for refrigerators, freezers, air conditioners, chillers and industrial refrigeration system.

【Applicable Refrigerants】 HFC and HFO Refrigerants

【Viscosity Grade】 VG32, VG68, VG100, VG170, VG220

【Package】 200 Liter Drum, 20 Liter Pail, 4 Liter×6 Metal Cans, 1 Liter×10 Metal Cans



### 【Application Table】

Refrigerants	R22	R717	R404A	R134a	R407C	R410A
SUNISO GS	✓	✓				
Evaporation Temp.	>-50℃(*1)	>-60℃(*2)				
SUNISO 4SA		✓				
Evaporation Temp.		>-60℃(*2)				
SUNISO 4HT		✓				
Evaporation Temp.		>-60℃(*2)				
SUNICE SL-S			✓	✓	✓	✓
Evaporation Temp.			>-60℃	>-60℃	>-40℃	>-40℃

(\*1) : Please use SUNISO 3GS in the range of evaporation temp as -50℃ to -30℃ and SUNISO 4GS as -30℃ and higher.

(\*2) : Applicable Evaporation Temp for Flooded-Evaporator type system.

# (Application Table)

## <SUNISO series>

Description	SUNISO 3GS	SUNISO 4GS	SUNISO 5GS	SUNISO 4SA	SUNISO 4HT
Viscosity Grade	VG32	VG56	VG100	VG56	VG56
Kinematic Viscosity ( 40°C ) mm <sup>2</sup> /s	29.6	55.0	97.1	53.9	54.3
Kinematic Viscosity ( 100°C ) mm <sup>2</sup> /s	4.45	6.10	8.50	6.73	8.22
Color (ASTM)	L0.5	L1.0	L1.0	L1.0	L0.5
Flash Point °C	178	188	208	198	240
Pour Point °C	-40	-35	-27.5	-40	-35
Acid Number mgKOH/g	0.01	0.01	0.01	0.01	0.01
Water ppm	20	20	20	20	20

## <SUNICE SL series>

Description	SUNICE SL-32S	SUNICE SL-68S	SUNICE SL-100S	SUNICE SL-170S	SUNICE SL-220S
Viscosity Grade	VG32	VG68	VG100	VG170	VG220
Kinematic Viscosity ( 40°C ) mm <sup>2</sup> /s	33.0	65.1	98.1	160	211
Kinematic Viscosity ( 100°C ) mm <sup>2</sup> /s	5.38	8.06	11.2	16.1	20.2
Color (ASTM)	L0.5	L0.5	L0.5	L0.5	L0.5
Flash Point °C	220	254	234	230	224
Pour Point °C	-45	-40	-35	-32.5	-32.5
Acid Number mgKOH/g	0.01	0.01	0.01	0.01	0.01
Water ppm	50	50	50	50	50
Separate Temperature (Oil 10%)					
R404A °C	<-60	<-60	<-60	<-60	<-60
R134a °C	-40	-25	-38	-52	<-60
R410A °C	-25	-6	-20	-33	-48

 **JAPAN SUN OIL COMPANY, LTD.**  
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JQA-QMA12719  
 JQA-EM5259  
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