



Product Data Sheet

[SUNISO® GS Series]

Refrigeration Oil for HC, HCFC and Ammonia Refrigerants R-22 / R-717 / R-290

“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.

RECOMMENDED APPLICATIONS

“Suniso® GS” series can be used in various installation regardless of compressor type or evaporator temperatures. These refrigeration oils are ideally suited for low temperature systems where evaporator temperatures are below - 20 °C compressors for refrigerator, freezer, air conditioner, chiller and industrial refrigeration system.

IMPORTANT CHARACTERISTICS

“Suniso® GS” series are premium quality oils in every sense, refined from specially selected naphthenic oils designed to yield stable, wax-free lubricants. Excellent lubricity and will not react with HC, HCFC and ammonia refrigerants. There will be no wax separation which causes system plugging. Similarly, stability at elevated temperatures are encountered in the compressor.

SELECTION GUIDE

“Suniso® GS” series are available in various viscosity with 3 major grades shown in the table of typical properties. Selection of the correct grade should be made in accordance with instructions of compressor manufacturer. Please refer to your local Japan Sun Oil representative for selection assistance.

APPLICATION GUIDE

No special precautions are required in handling “Suniso® GS” series beyond those normally used with petroleum oils. However, application should be consistent with accepted refrigeration practice and every effort made to avoid exposure to the atmosphere or possible contamination.

TYPICAL PROPERTIES

Test Description	SUNISO® 3GS	SUNISO® 4GS	SUNISO® 5GS
ISO Viscosity Grade	VG32	VG56	VG100
Density @ 15°C g/cm³	0.909	0.914	0.916
Color ASTM	L0.5	L1.0	L1.5
Flash Point COC °C	176	188	216
Pour Point °C	-40	-35	-27.5
Floc Point °C	-53	-47	-37
Kin. Viscosity @ 40°C mm²/s	29.4	54.4	96.3
Kin. Viscosity @ 100°C mm²/s	4.443	6.294	8.61
Cu Corrosion @ 100 ° C x 3 hrs	1a	1a	1a
Total Acid No. mgKOH/g	0.01	0.01	0.01
Dielectric Strength kV	55	50	45

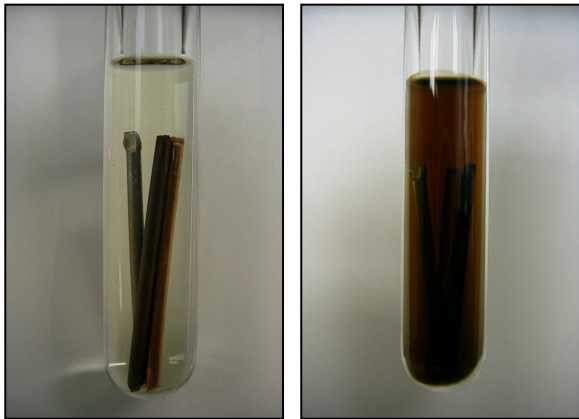


SUMMARY OF BENEFITS

“Suniso® GS” series offer the user the following benefits:

- ✓ **Chemical Stability** to extend service life, reducing service calls or maintenance costs.
- ✓ **Cleaner Operation** of the compressor with fewer deposits that may cause valve sticking.
- ✓ **Excellent Low Temperature Performance** with no wax deposits to plug the system.

Sealed Tube Test

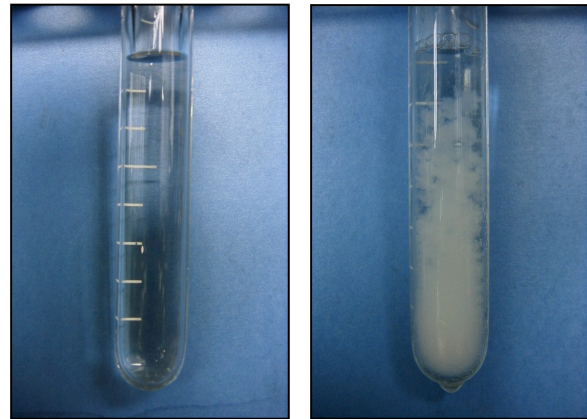


SUNISO® GS

Other Refrigeration Oils

Condition : SUNISO® 3GS, 175°C x 14 Days
 Catalyst : Fe, Cu, Al
 Ref. : R-12

Floc Test



SUNISO® GS

Other Refrigeration Oils

Condition : SUNISO® 3GS at -50°C
 Ref. : R-12

PACKAGE

Available by **200L Drum**, **20L Pail**,
4L×6 Case and **1L×10 Case**



Distributed by:

- The typical values contained on this data sheet represent the values of the product and relates only to the named product. User is solely responsible for determining the suitability of the product for its use intended by user, including use in any process and the combination of the product with any other material. Please contact your distributor for additional information.
- SUNISO® has approvals from various manufacturers of refrigerator and air-conditioning, including Daikin, MYCOM, Hitachi, Panasonic (Inc. Sanyo), Mitsubishi Heavy Industries, Toshiba Carrier, GMCC, Tecumseh, Trane, Carlyle, Bristol, General Electric, Electrolux, Embraco, Samsung, LG, Daewoo, Tatung, Fusheng, Whirlpool, Johnson Controls, Kulthorn Kirby, etc.
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