

Safety Data Sheet

SUNISO 4GS

Revision Date 28/02/2014

Version 1.0



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

PRODUCT TRADE NAME:

SUNISO 4GS

PRODUCT CODE: 1SAU

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE:

Lubricant for refrigerator compressors.

USES ADVISED AGAINST

This product should not be used for other purposes than those specified without the advice of an expert.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY IDENTIFICATION:

PETRONAS LUBRICANTS BELGIUM NV

Ingberthoeveweg 4

B-2630 Aartselaar

Tel: +32 (0)3 - 458 12 30

Fax: +32 (0)3 - 458 14 78

COMPETENT PERSON RESPONSIBLE FOR SAFETY DATA OF PRODUCT:

Herwig De Landtsheer

e-mail: tcs@be.petronas.com

1.4 EMERGENCY TELEPHONE NUMBER

+32 (0)70 - 245 245, Poisons Centre Rue Bruynstraat, B-1120 Brussel/Bruxelles, Belgium

+31 (0)30 - 274 88 88, Nationaal Vergiftigingen Informatie Centrum, Antonie van Leeuwenhoeklaan 9, 3721 MA BILTHOVEN, Nederland

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Directives 67/548/EEC or 1999/45/EC:

This product is not classified according to Directive 67/548/CE and following updates.

Regulation (EC) No 1272/2008

This product is not classified according to Regulation 1272/2008 and following updates.

2.2 LABEL ELEMENTS

This product is not labelled according to EC legislation

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SIGNAL WORD

Not applicable.

CONTAINS:

HAZARD STATEMENTS

Not applicable.

PRECAUTIONARY STATEMENTS

Not applicable.

OTHER INDICATIONS:

None.

2.3 OTHER HAZARDS

This product is not classified as PBT nor vPvB following criteria in Annex XIII of REACH.

Prolonged or repeated skin contact sometimes may cause irritations and dermatitis.

When the product is used to high temperature, direct contact of skin and eyes with hot product may cause thermal burns.

In case of accidents involving pressurized circuits and the like, any substance may be accidentally injected under the skin, even without external damage. In this case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment.

In exceptional cases (prolonged storage in tanks polluted with water, presence of sulfo-reducer anaerobic bacteria) this substance may degrade itself, developing low quantities of sulphurous components, included H₂S. This kind of risk should be considered especially for confined space entry operations involving direct exposure to the vapours in the tank.

The product is not readily biodegradable. In case of large accidental spills, it is a potential source of soil, watercourse and groundwater pollution.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES

Directive 67/548/EEC:

COMPONENTS	EINECS	CAS	REG_NUM	QUANTITY	SYMBOL	R-PHRASES
Distillates (petroleum) hydrotreated heavy naphthenic (649-465-00-7)	265-155-0	64742-52-5	01-2119467170-45	100	-	-

Regulation (EC) No 1272/2008

COMPONENTS	EINECS	CAS	REG_NUM	QUANTITY	CLASS	H-PHRASES
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Distillates (petroleum) hydrotreated heavy naphthenic (649-465-00-7)	265- 155-0	64742- 52- 5	01- 2119467170 - 45	100 %	-	-
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R-phrases, H-phrases and list of abbreviations: see heading 16.

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

INGESTION:

Do not induce vomiting to avoid aspiration into the respiratory tracts. Obtain medical attention. If vomiting occurs spontaneously, keep head down to avoid the risk of aspiration into the lungs. Never give anything by mouth to an unconscious person.

EYE CONTACT:

Rinse thoroughly with plenty of water for at least 10 minutes keeping eyelids open. Remove contact lenses if this can be done easily. Obtain medical attention in case of development and persistence of pain and redness.

In case of contact with hot product, rinse thoroughly with plenty of water to dissipate heat. Obtain immediate medical attention to assess eye conditions and the correct treatment to be practiced.

SKIN CONTACT:

Remove contaminated clothes and shoes and rinse thoroughly with plenty of water and soap.

In case of thermal burns, cool the injured body portion and keep under fresh running water at least 5 minutes or until the pain disappears. DO NOT try to remove the portion of clothes attached to the skin burned. Obtain immediate medical attention.

In case of accidents involving pressurized circuits, product injection may happen even without external damage. In this case, bring the victim immediately to an hospital, without waiting for the onset of symptoms.

INHALATION:

Expose affected person to fresh air and obtain medical attention if necessary.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Contact may cause skin irritation, slight eye irritations and irritation of the respiratory tract (following high inhalation of mists and vapours generated at elevated temperatures). In case of ingestion, sometimes it is possible a slight gastroenteric irritation.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

In case of ingestion, it is recommended to presume that aspiration of product has occurred. If a big ingestion is occurred, bring immediately the victim to hospital without waiting for the onset of symptoms.

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5. FIREFIGHTING MEASURES

FLASH POINT: >150°C

5.1 EXTINGUISHING MEDIA

This product has no special fire risk. In case of fire use foam, carbon dioxide, dry chemical powder and water mist.

Avoid high pressure water jet. Use water jet only to cool down surfaces exposed to fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Don't breathe combustion fumes: fire can form harmful compounds.

COMBUSTION PRODUCTS:

Oxides of carbon, compounds of sulphur, phosphorus, nitrogen and products of incomplete combustion.

5.3 ADVICE FOR FIREFIGHTERS

Protective clothing complete with autobreathing feature.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Avoid contact with skin and eyes by wearing appropriate protective clothing. Respiratory protection devices are required only in some cases (e.g. presence of mist).

In case of a big spillage, the actions to take must be assessed and approved, when possible, by qualified and competent staff, charged to run the emergency.

Surfaces on which the product has been spilled may become slippery.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent the material from entering soil, sewers and water courses. Contact the appropriate authorities if necessary.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

In case of large spills dike and pump into suitable containers for disposal. Contain small spills with absorbent material. Put dirty material in suitable container. Dispose of dirty material in accordance with local or national regulations.

6.4 REFERENCE TO OTHER SECTIONS

Refer to sections 8 and 13 for more information.

7. HANDLING AND STORAGE

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7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid frequent and prolonged skin contact and contact with eyes. Provide adequate ventilation to avoid mist or aerosol. Practice reasonable personal cleanliness.

Avoid the risk of sliding.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store under cover in the original container securely closed away from heat and sources of ignition. Do not store in the open air. Assure a correct ventilation of premises and the control of possible leak.

Keep the product only in original container or in a suitable container (mild or inox steel; some synthetic material maybe not suitable: check compatibility linked to use conditions with producer).

Keep containers closed and correctly labelled.

Empty containers may contain combustible residue. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned and declared safe.

Structure and characteristics of storage tank must be in accord with regulations.

7.3 SPECIFIC END USE(S)

Refer to the uses listed in Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

OCCUPATIONAL EXPOSURE LIMITS:

The recommended exposure limits (ACGIH) are:

CHEMICAL AGENT		LIMIT
oil mists	TLV/TWA (8 h)	5 mg/m ³
oil mists	TLV/STEL	10 mg/m ³

8.2 EXPOSURE CONTROLS

TECHNICAL PRECAUTIONS:

Avoid production and diffusion of mist and aerosol with utilization of localized ventilation/aspiration or other required precautions. If necessary, adopt all required precaution to avoid product immission in environment (e.g., blasting systems, catch basins, ...).

Guarantee an effective ventilation during the use of hot product in confined areas. Before to enter in a storage tank and to start any operation in a confined area, make a suitable cleaning, check atmosphere and oxygen content, check the flammability level and the possible presence of sulphured components. If their presence is suspected, make a specific evaluation of risks from inhalation, linked at the presence of hydrogen sulphide in confined areas, to define the best precautionary and control measures to adopt, connected to local conditions, and the possible emergency procedures.

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Do not release in the environment. Storage plants must adopt all required precaution to avoid product immission in environment (e.g., blasting systems, catch basins, ...).

RESPIRATORY PROTECTION:

None required under normal conditions of use. Use approved full face respirator with organic vapour filter cartridge if the recommended exposure limits are exceeded.

HAND AND SKIN PROTECTION:

Wear suitable gloves in oil-proof material (i.e. neoprene, nitrile). Gloves should be changed when they show wear. The kind of gloves and the term of use must be decided from employer with regard to processing and to allow for legislation on personal protection equipment and glove producer's indications. Wear gloves only with clean hands.

Wear suitable protective clothing (for further information, refer to CEN-EN 14605); change it immediately in case of large contamination and wash it before subsequent use.

Practice reasonable personal cleanliness.

EYE PROTECTION:

Chemical goggles and face shield in case of oil splashes.

ENVIRONMENTAL EXPOSURE CONTROLS:

Refer to technical precautions and also to sections 6.2, 6.3, 7.2, 12 and 13.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

CHEMICAL AND PHYSICAL PROPERTIES	VALUE	METHOD
APPEARANCE	VISCOUS LIQUID	
DENSITY 15°C	0.916 G/CM3	
WATER SOLUBILITY	INSOLUBLE	
VISCOSITY @ 40°C	55 CST	ASTM D 445
VISCOSITY @ 100°C	5,9 CST	ASTM D 445
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NOT DETERMINED	
BOILING POINT	>230°C	
FLASH POINT	>150°C	
ODOUR	NOT DETERMINED	
ODOUR THRESHOLD	NOT DETERMINED	

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PH	NOT APPLICABLE	
MELTING POINT/FREEZING POINT	NOT DETERMINED	
EVAPORATION RATE	NOT DETERMINED	
FLAMMABILITY (SOLID, GAS)	NOT APPLICABLE	
VAPOUR PRESSURE	NOT DETERMINED	
VAPOUR DENSITY	NOT DETERMINED	
PARTITION COEFFICIENT: N-OCTANOL/WATER	NOT DETERMINED	
AUTO-IGNITION TEMPERATURE	NOT DETERMINED	
DECOMPOSITION TEMPERATURE	NOT DETERMINED	
EXPLOSIVE PROPERTIES	NONE	
OXIDISING PROPERTIES	NOT DETERMINED	

9.2 OTHER INFORMATION

CHEMICAL AND PHYSICAL PROPERTIES	VALUE	METHOD
STOLPUNT	-36 °C	ASTM D 97

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

Read carefully all information provided in other sections of heading 10.

10.2 CHEMICAL STABILITY

The product is stable under normal conditions of use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Contact with strong oxidising agents (peroxides, chromates,...) may cause fire danger. Mixture with nitrate or other strong oxidising agents (chlorates, perchlorates and liquid oxygen) may give an explosive mass, and it is not possible to estimate before sensibility to heat, friction and shock.

10.4 CONDITIONS TO AVOID

This product must be kept far from heat sources. In any case, avoid exposing product to temperatures above the flash point.

10.5 INCOMPATIBLE MATERIALS

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Strong oxidizing agents, hard acids and bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

INGESTION:

Unlike to cause harm if accidentally swallowed in small doses, though ingestion of large quantities may cause gastro-intestinal effects.

The LD50 oral is >2000 mg/Kg.

INHALATION:

Inhalation of mists and vapours generated at elevated temperatures may cause respiratory irritation.

EYE CONTACT:

Contact may cause slight irritations.

SKIN CONTACT:

Product is not an irritant. The LD50 Dermal is >2000 mg/Kg.
Prolonged or repeated contacts may cause irritations or dermatitis.

CARCINOGENICITY:

Based on available data, the classification criteria are not met.

MUTAGENICITY:

Based on available data, the classification criteria are not met.

TOXICITY FOR REPRODUCTION:

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

This product is not classified dangerous for the environment: LL50 (rainbow trout, 96h) >1000 mg/L, EC50 (algae, 72h) >1000 mg/L

12.2 PERSISTENCE AND DEGRADABILITY

This product is not classified dangerous for the environment, but it is considered not biodegradable.

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It is slowly miscible in water, but, anyway, avoid large spills of product to prevent soil, watercourse and groundwater pollution because it is a potential source of soil, watercourse and groundwater pollution.

12.3 BIOACCUMULATIVE POTENTIAL

Not available.

12.4 MOBILITY IN SOIL

Given its physical and chemical characteristics, the product generally shows weak tendency to evaporation, little mobility in the ground and it can be adsorbed from soil.

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

Not available.

12.6 OTHER ADVERSE EFFECTS

Because the dispersion in the environment may result in contamination of environmental matrix (soil, subsoil, surface water and groundwater), do not release in the environment.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Prevent contamination of soil, drains and surface waters.

Do not discharge in sewers, tunnels or water courses. Dispose in accordance with local or national regulations via authorised person/licensed waste disposal contractor.

The used product is to be considered a special waste to be classified in accordance to Directive 2008/98/EC on wastes and related legislation.

Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.

14. TRANSPORT INFORMATION

14.1 UN NUMBER

Not applicable

14.2 UN PROPER SHIPPING NAME

Not applicable

14.3 TRANSPORT HAZARD CLASS(ES)

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Not applicable

14.4 PACKING GROUP

Not applicable

14.5 ENVIRONMENTAL HAZARDS

Not applicable

14.6 SPECIAL PRECAUTIONS FOR USER

Not applicable

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 AND THE IBC CODE

Not applicable

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Regulation (EC) No 1272/2008, with all National and European related legislations - on classification, labelling and packaging of substances and mixtures - and following adjustments to technical and scientific progress.

Regulation (EC) No 790/2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Directive 1999/45/EC and all following updates, together with its national realization, about classification, packaging and labelling of dangerous preparations

Regulation (EC) No 1907/2006, with all National and European related legislations - concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Directives 89/391/EC, 89/654/EC, 89/655/EC, 89/656/EC, 90/269/EC, 90/270/EC, 90/394/EC, 90/679/EC and all following updates, together with its national realization, about improvement of worker safety and health

Directives 98/24/EC and all following updates, together with its national realization, about protection of worker safety and health against chemical agent risks

Directive 1991/156/EC and all following updates, together with national waste legislation

EC directives and national environment protection legislation (air, water and soil)

15.2 CHEMICAL SAFETY ASSESSMENT

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This product contains substances for which chemical safety assessments are not yet available.

16. OTHER INFORMATION

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

This product must not be used in applications other than recommended without first seeking the advice of the Technical Department.

Sheet complies with the criteria of Annex I of Regulation (EU) No. 453/2010 as well as with Regulation (EC) No. 1272/2008 and Directive 99/45/EC and following adjustments.

As regard as the previous version this sheet has been changed in all sections.

List of abbreviations used:

N.A. Not applicable

N.D. Not available

PBT: Persistent, Bioaccumulative and Toxic

vPvB: Very Persistent and very Bioaccumulative

DNEL: Derived No-Effect Levels

PNEC: Predicted No-Effect Concentration

This product must be stored, handled and used according to correct industrial hygienic practices and in compliance with laws in force.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be considered as any guarantee of specific properties.