Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 08/20/2013

Version:

FOUR SEASONS

Compressors

Recommended for

Refrigeration Dil 59000

Automotive Air conditioning

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. **Product identifier**

Product form

: Substance

Trade name

FOUR SEASONS MINERAL OIL 55 GL

Product code

859600010

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

: Follow Label Directions

Details of the supplier of the safety data sheet

FOUR SEASONS MFG CO. 1801 WATERS RIDGE DR. LEWISVILLE, TX 75057

Emergency telephone number

Emergency number

CHEMTREC 24 Hour 1-800-424-9300

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Inhalation:dust,mist) H332

2.2 Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

Warning

Hazard statements (GHS-US)

H332 - Harmful if inhaled

Precautionary statements (GHS-US)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P271 - Use only outdoors or in a well-ventilated area

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P312 - Call a POISON CENTER/doctor/.../if you feel unwell

2.3. Other hazards

No additional information available

Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information

Substances 3.1.

Name

HC REFRIGERATION OIL

CAS No

EC no

EC index no

Name	Product identifier	%	Classification (GHS-US)
distillates (petroleum), hydrotreated heavy naphthenic	(CAS No) 64742-52-5	100	Acute Tox. 4 (Inhalation:dust,mist), H332
			11002

Full text of H-phrases: see section 16

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general

- Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation
- Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

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First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

First-aid measures after eye contact

: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand

Unsuitable extinguishing media

Special hazards arising from the substance or mixture

No additional information available

Advice for firefighters

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting

: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measure

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Evacuate unnecessary personnel.

: Do not use a heavy water stream.

For emergency responders

Protective equipment

: Equip cleanup crew with proper protection.

Emergency procedures

: Ventilate area.

6.2. **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Use only outdoors or in a well-ventilated area. Avoid breathing

dust/fume/gas/mist/vapors/spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products

: Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Specific end use(s) 7.3.

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

distillates (petroleum), hydro	otreated heavy naphthenic (64742-52-5)	 		 17.
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ Inhal	able fraction	

Exposure controls

Personal protective equipment

: Avoid all unnecessary exposure.

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Hand protection

: Wear protective gloves.

Eye protection

Chemical goggles or safety glasses.

Respiratory protection

: Wear appropriate mask.

Other information

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state

: Liquid

Appearance

: Liquid.

: 420 g/mol

Molecular mass Color

Colourless to light yellow.

Odor

characteristic.

Odor threshold

No data available

рΗ

No data available

Relative evaporation rate (butyl acetate=1) Melting point

: No data available

-33 ℃

Freezing point

No data available

Boiling point

: > 332 ℃

Flash point

: > 204 ℃

Self ignition temperature

: > 343 ℃

Decomposition temperature

: No data available

Flammability (solid, gas)

No data available

Vapor pressure

< 0.0001 mm Hg @20C

Relative vapor density at 20 ℃

No data available

Relative density

: 0.908

Solubility

: Insoluble in water.

Log Pow

: No data available

Log Kow

No data available

Viscosity, kinematic

8.42 cSt @ 100c

Viscosity, dynamic

: No data available : No data available

Explosive properties Oxidizing properties

: No data available

Explosive limits

No data available

92 Other information

VOC content

: 2.53 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

Acute toxicity

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

distillates (petrole	um), hvdrotreated heavy r	aphthenic (64742-		 		
			<u> </u>	 		
LD50 oral rat		> 5000 ml/kg			10.00	1 1

: Harmful if inhaled.

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LD50 dermal rabbit		> 2000 mg/kg
LC50 inhalation rat (mg/l)		2.18 mg/l/4h
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	::::	Not classifiedBased on available data, the classification criteria are not met
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classifiedBased on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classifiedBased on available data, the classification criteria are not met
Aspiration hazard	:	Not classifiedBased on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	:::	Based on available data, the classification criteria are not met. Harmful if inhaled.
Symptoms/injuries after inhalation	:	Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

distillates (petroleum), hydrotreated heavy na	phthenic (64742-52-5)		 	
EC50 Daphnia 1	> 1000 mg/l 48 HOURS			

12.2. Persistence and degradability

FOUR SEASONS MINERAL OIL 55 GL	1 11 11	: 12:	: ::::	1. 1. 1.	1 111	
Persistence and degradability	No	t established.		 - :		

distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5) Persistence and degradability Not established.

12.3. Bioaccumulative potential

FOUR SEASONS MINERAL OIL 55 GL			
Bioaccumulative potential	Not established.		

distillates (petroleum), hydrotreated heavy na	phthenic (64742-52-5)	1. 1. 1. 1.		 : :
Bioaccumulative potential	Not established.	 		

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

US DOT (ground):

Not regulated,

ICAO/IATA (air):

Not regulated,

IMO/IMDG (water):

Not regulated,

14.2. UN proper shipping name

DOT Proper Shipping Name

: Not regulated

14.3. Additional information

Other information

: No supplementary information available.

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Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA Section 311/312 Hazard Classes

Delayed (chronic) health hazard

distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

15.2. International regulations

CANADA

distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

Listed on the AICS (the Australian Inventory of Chemical Substances)

Listed on Inventory of Existing Chemical Substances (IECSC)

Listed on the Korean ECL (Existing Chemical List) inventory.

Listed on New Zealand - Inventory of Chemicals (NZIoC)

Listed on Inventory of Chemicals and Chemical Substances (PICCS)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Indication of changes

: Revision - See : *.

Other information

: None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
H332	Harmful if inhaled	

NFPA health hazard

: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

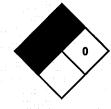
NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



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HMIS III Rating

Health

: 0 Minimal Hazard - No significant risk to health

Flammability

: 1 Slight Hazard

Physical

: 0 Minimal Hazard

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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