



MATERIAL SAFETY DATA

SECTION 1. IDENTIFICATION OF PRODUCT

11 MANUFACTURER'S NAME Virginia Chemicals Inc.		12 EMERGENCY TELEPHONE NUMBER 804-484-5000
13 ADDRESS (INCLUDE STREET NUMBER AND ZIP CODE) 3340 West Norfolk Road, Portsmouth, Virginia 23703		
14 SALES NAME SUNISO 3GS Refrigeration Oil		LABEL CODE 29-148-981
15 CHEMICAL NAME OR DESCRIPTION Napthenic Base Oil CAS #64742183		
16 DOT HAZARD CLASSIFICATION (REGULATED ARTICLES) n.a.	17 DOT SHIPPING NAME (REGULATED ARTICLES) n.a.	

SECTION 2. PHYSICAL DATA

21 APPEARANCE AND ODOR Colorless liquid - mild oil odor	
22 SPECIFIC GRAVITY (WATER = 1) (LIQUIDS ONLY) 0.92	23 SOLIDS CONTENT (PERCENT BY WEIGHT) (SOLUTIONS, DISPERSIONS OR PASTES ONLY) n.a.
24 SOLUBILITY IN WATER (PERCENT BY WEIGHT) (SPECIFY TEMPERATURE IN DEGREES °F) 80 ppm	25 BOILING POINT (DEGREES °F) (NON-AQUEOUS LIQUIDS ONLY) High, wide range
26 VAPOR PRESSURE (MM OF HG AT °F) (NON-AQUEOUS LIQUIDS ONLY) under .0001	27 VAPOR DENSITY (AIR = 1) (NON-AQUEOUS LIQUIDS ONLY) 10
28 EVAPORATION RATE (BUTYL ACETATE = 100) (NON-AQUEOUS LIQUIDS ONLY) 1000x slower	29 pH (AQUEOUS LIQUIDS ONLY) n.a.

SECTION 3. FIRE AND EXPLOSION HAZARD DATA

31 FLASH POINT (SPECIFY METHOD) (DEGREES °F) 330°F Min. COC Autoignition Temp. 680°F EST	32 FLAMMABLE LIMITS (VAPOR IN AIR) (PERCENT BY VOLUME) LOWER UPPER Not determined not dete:
33 FIRE-EXTINGUISHING MEDIA CO ₂ , dry chemical, water fog, chemical foam	
34 SPECIAL FIRE-FIGHTING PROCEDURES Wear self-contained breathing gear when fire fighting in confined spaces	
35 UNUSUAL FIRE AND EXPLOSION HAZARDS	

SECTION 4. REACTIVITY DATA

41 STABILITY (INCLUDING HAZARDOUS POLYMERIZATION)	UNSTABLE	CONDITIONS TO AVOID
	STABLE	
42 INCOMPATIBILITY (MATERIALS TO AVOID) Incompatible with strong oxidizers		
43 HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide and asphyxiants		

SECTION 5. SPILL OR LEAK PROCEDURES

51 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Same as for other mineral oils	52 WASTE DISPOSAL METHOD Soak up with absorbent material.
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52 WASTE DISPOSAL METHOD
In accordance with local, state and federal laws and regulations governing disposal of oily wastes:



SECTION 6. HEALTH HAZARD DATA

6.1 EFFECTS OF CONTACT WITH EYES

No eye effects expected.

6.2 EFFECTS OF CONTACT WITH SKIN (LOCAL AND SYSTEMIC)

No skin effects expected.

6.3 EFFECTS OF INHALATION (LOCAL AND SYSTEMIC)

None expected.

6.4 EMERGENCY AND FIRST AID PROCEDURES

None normally required. If swallowed, induce vomiting. Flush area of contact with plenty of water. If any irritation develops after eye contact, a physician should be consulted. Reasonable personal cleanliness should be observed.

6.5 MEDICAL EXAMINATIONS

SECTION 7. SPECIAL PROTECTION INFORMATION

7.1 RESPIRATORY PROTECTION (SPECIFY TYPE)

None

7.2 GLOVES (SPECIFY MATERIAL OF CONSTRUCTION)

None

7.3 EYE PROTECTION (SPECIFY TYPE)

None

7.4 OTHER PROTECTIVE EQUIPMENT (CAP, APRON, COVERALLS, BOOTS, EYEWASH FOUNTAIN, SAFETY SHOWER, ETC.)

n.a.

7.5 PERSONAL HYGIENE

Employees handling should observe reasonable personal cleanliness.

7.6 ENGINEERING CONTROL OF HEALTH HAZARDS (VENTILATION, ETC.)

Ventilate as needed to maintain compliance with workplace environmental exposure limit.

SECTION 8. SUBSTANCES FOR WHICH STANDARDS HAVE BEEN SET

SUBSTANCE	PERCENT	THRESHOLD LIMIT VALUE (SPECIFY UNITS SUCH AS PPM, MG PER CUBIC METER, MPPCF, ETC.)
8.1 USE THIS SPACE WHEN THE PRODUCT IS ESSENTIALLY A SINGLE CHEMICAL COMPOUND OR ELEMENT AS IDENTIFIED IN SECTION 1.5	-	8 Hr. Time Weighted Permissible exposure 5.0 mg/m ³ . Government regulation.
8.2 COMPONENTS (10 PERCENT OR MORE) OF MIXTURES		Note: Practically non-toxic. Oral LD ₅₀ estimated in excess of 15 grams per Kilogram of rat body weight.

SECTION 9. SPECIAL PRECAUTIONS

9.1 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE.

As for other mineral oils. NFPA III B Storage requirements.

9.2 OTHER PRECAUTIONS