

MATERIAL SAFETY DATA SHEET



Product name: Athen Marine REF Syn POE 220
Supersedes date: November 2024
Product No.: SYREFPOE220

Pages: 6
Revision: August 2025
SDS-ID: A/POE/220/2024

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Athen Marine REF Syn POE 220
Container size: -

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

Application: Marine Synthetic Refrigeration Compressor Oil

1.3. Details of the supplier of the safety data sheet

Supplier: Athen Marine Lubricants LLC
PO Box: 111541
Dubai, UAE.
Tel: +971 4 258 7297
Email: info@almatrmarine.com
www.almatrmarine.com

Emergency telephone number

Emergency telephone: Tel: +971506289926

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS: Not classified.

2.2. Label elements

The substance/mixture does not meet the criteria for classification and labelling.

2.3. Other hazards

PBT/vPvB: Not applicable
Other: Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema, skin cracking and oil acne. The harmful effects may increase in used oil.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Mineral oil and additives. DMSO<3% (IP 346)

Ingredient Name	% (w/w)	CAS Number
Proprietary fatty acid	>60	Not Available
Proprietary additives	1-20	Not Available

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Move into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

Skin contact: Remove contaminated clothing. Rinse skin immediately. Thoroughly rub with liquid soap and wash with lukewarm water. Get medical attention if any discomfort continues.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: DO NOT induce vomiting. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects
: See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: If there is any suspicion of aspiration into the lungs either directly or as a result of vomiting, obtain medical advice.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media:

Extinguish with foam, carbon dioxide, dry powder or water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Do not use a water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards: When heated and in case of fire, harmful vapours/gases may be formed. Fire in closed areas should only be extinguished by trained personnel.

5.3. Advice for firefighters

Protective equipment for fire-fighters: Wear suitable respiratory protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark the spillage. Avoid inhalation of oil mist and contact with skin and eyes. Keep public away from danger area. In case of spills, beware of slippery floors and surfaces.

Protective equipment: Wear necessary protective equipment.

6.2. Environmental precautions

Environmental precautions: Avoid discharge into drains. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material.

6.4. Reference to other sections

Reference: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid inhalation of oil mist and contact with skin and eyes. Avoid prolonged and repeated contact with oil, particularly used oil. Wash hands before breaks and before smoking, eating or drinking.

Technical measures: Use work methods which minimize oil mist production. Do not smoke or use open fire or other sources of ignition.

Technical precautions: When working with heated oil, mechanical ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Store in tightly closed original container in a well-ventilated place.

Storage conditions: Keep at a temperature not exceeding: 45°C.

7.3. Specific end use(s)

Specific use(s): Lubricant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
-	Oil mist, -mineral	-	5 mg/m3	PEL (Long Term)	-	
		-	10 mg/m3	PEL (Short Term)	-	

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapours and oil mist.

Respiratory equipment: No specific recommendations.

Hand protection: Gloves (synthetic rubber, neoprene)

Eye protection: Wear approved, tight fitting safety glasses where splashing is probable.

Skin protection: Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures: Wash hands after handling. Observe good chemical hygiene practices. Wash contaminated clothing before reuse. When using do not eat, drink or smoke. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	Clear & Bright
<u>Colour:</u>	Liquid.
<u>Odour:</u>	Not Available
<u>Odour threshold:</u>	Not available.
<u>pH:</u>	Not applicable.
<u>Melting point / freezing point:</u>	Not available.
<u>Boiling point:</u>	Not available.
<u>Flash point:</u>	240°C ASTM D 92
<u>Evaporation rate:</u>	Not available.
<u>Flammability (solid, gas):</u>	Not applicable.
<u>Explosion limits:</u>	Not available.
<u>Vapour pressure:</u>	Not available.
<u>Vapour density:</u>	Not available.
<u>Relative density:</u>	0.9 – 0.97 (15°C)
<u>Solubility:</u>	Soluble in Organic solvents.
<u>Partition coefficient (n-octanol/water):</u>	Not available.
<u>Auto-ignition temperature (°C):</u>	Not available.
<u>Decomposition temperature (°C):</u>	Not available.
<u>Viscosity:</u>	220 cSt (40°C)
<u>Explosive properties:</u>	Not available.
<u>Oxidising properties:</u>	Not available.

9.2. Other information

Other data: Pour point (°C): -42

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Not reactive.

10.2. Chemical stability

Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: None known.

10.4. Conditions to avoid

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Conditions/materials to avoid: Heat, sparks, flames.

10.5. Incompatible materials

Incompatible materials: Strong oxidizing substances.

10.6. Hazardous decomposition products

Hazardous decomposition products: None under normal conditions. Hazardous polymerisation will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

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

Inhalation: Inhalation of oil mist or vapours formed during heating of the product may irritate the respiratory system and provoke throat irritation and coughing.

Skin contact: Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis.

Eye contact: May cause temporary eye irritation.

Ingestion: Low order of acute toxicity, but aspiration following ingestion and vomiting may cause severe and potentially fatal chemical pneumonitis.

Specific effects: Used oil may contain harmful contaminants.

SECTION 12: ECOLOGICAL INFORMATION

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12.1. Toxicity

Ecotoxicity: Not harmful to aquatic organisms. Expected LC/EC50 value > 100 mg/l

12.2. Persistence and degradability

Degradability: Potentially degradable, but will persist in the environment for long periods.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: Spillages may penetrate the soil causing ground water contamination

12.5. Results of PBT and vPvB assessment

PBT/vPvB: Not known.

12.6. Other adverse effects

Other adverse effects: Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste is classified as hazardous waste. Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging: Disposal through approved facilities is recommended.

SECTION 14: TRANSPORT INFORMATION

The product is not regulated as dangerous goods under IMDG Code, IATA-DGR and ADR/RID.

	DOT	TDG	IATA	IMDG/IMO
UN Number	Not regulated	Not regulated	Not regulated	Not regulated
Un proper Shipping Name	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazards Class	Not regulated	Not regulated	Not regulated	Not regulated
Packing Group	Not regulated	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No	No
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated	Not regulated

SECTION 15: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Handling of used oils:

Protect health - avoid prolonged and repeated skin contact. Wash with soap and water. Protect the environment - do not pollute drains, water courses or the soil. Contact your local authority for any used oil disposal instructions.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature.