

#### Gulf Marine Pte. Ltd.

Chemwatch: **5624-41** Version No: **3.1** Safety Data Sheet in accordance with SS 586-3:2022 Issue Date: 27/09/2023 Print Date: 07/05/2025 S.GHS.SGP.EN.E

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

#### **Product Identifier**

Product name	GulfSea PE Cooloil 32,46,68,100,170,220	
Chemical Name	Not Applicable	
Synonyms	Not Available	
Chemical formula	Not Applicable	
Other means of identification	2SR10320-82, 2SR10460-82, 2SR10680-82, 2SR11000-82, 2SR11700-82, 2SR12200-82	

#### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Refrigeration Oil Use according to manufacturer's directions.

#### Details of the manufacturer or importer of the safety data sheet

Registered company name	Gulf Marine Pte. Ltd.
Address	37 Tuas Road 638503 Singapore
Telephone	+65 6592 0120
Fax	Not Available
Website	Not Available
Email	sds@gulf-marine.com

#### Emergency telephone number

• • •	
Association / Organisation	Gulf Marine Pte. Ltd.
Emergency telephone number(s)	+65 6592 0120
Other emergency telephone number(s)	Not Available

#### **SECTION 2 Hazards identification**

#### Classification of the substance or mixture

Classification	Non hazardous
Label elements	
Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable
Hazard statement(s)	
Not Applicable	
Precautionary statement(s) Pre	evention
Not Applicable	
Precautionary statement(s) Re	sponse
Not Applicable	

Precautionary statement(s) Storage

Not Applicable

#### Precautionary statement(s) Disposal

Not Applicable

Other hazards Not Applicable

#### **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name	Synonyms	Chemical formula
Not Available	>60	Proprietary fatty acid		Not Available
Not Available	1-20	Proprietary additives		Not Available

#### **SECTION 4 First aid measures**

Description of first aid measures		
Eye Contact	<ul> <li>If this product comes in contact with eyes:</li> <li>Wash out immediately with water.</li> <li>If irritation continues, seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>	
Skin Contact	<ul> <li>If skin or hair contact occurs:</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>	
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>	
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>	

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5 Firefighting measures**

#### Extinguishing media

- Foam.
- Dry chemical powder.BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog Large fires only.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result		
Advice for firefighters			
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>Avoid spraying water onto liquid pools.</li> <li><b>DO NOT</b> approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> </ul>		
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> <li>Mists containing combustible materials may be explosive.</li> <li>Combustion products include:</li> <li>carbon dioxide (CO2)</li> <li>other pyrolysis products typical of burning organic material.</li> </ul>		

#### **SECTION 6 Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

See section 8

**Environmental precautions** 

See section 12

#### Methods and material for containment and cleaning up

Minor Spills

- Remove all ignition sources.
  - Clean up all spills immediately.
  - Avoid breathing vapours and contact with skin and eyes.
  - Control personal contact with the substance, by using protective equipment.

	<ul> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>
Major Spills	<ul> <li>Moderate hazard.</li> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Increase ventilation.</li> <li>Stop leak if safe to do so.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Absorb remaining product with sand, earth or vermiculite.</li> <li>Collect solid residues and seal in labelled drums for disposal.</li> <li>Wash area and prevent runoff into drains.</li> <li>If contamination of drains or waterways occurs, advise emergency services.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

#### **SECTION 7 Handling and storage**

#### Precautions for safe handling Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. Safe handling When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. Store in original containers. Keep containers securely sealed No smoking, naked lights or ignition sources. Other information Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

#### Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	Avoid contamination of water, foodstuffs, feed or seed. Avoid reaction with oxidising agents

#### SECTION 8 Exposure controls / personal protection

#### **Control parameters**

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Not Available			
Ingredient	Original IDLH	Revised IDLH	
GulfSea PE Cooloil 32,46,68,100,170,220	Not Available	Not Available	

#### Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-desig can be highly effective in protecting workers and will typically be independent of worker interactions to provide this h The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant in design of a ventilation system must match the particular process and chemical or contaminant in use.	igh level of protection.
	Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air con the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulati effectively remove the contaminant.	taminants generated in
	Type of Contaminant:	Air Speed:
	solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50- 100 f/min)
	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding,	

	direct spray, spray painting in shallow booths, drum filling, generation into zone of rapid air motion)	conveyer loading, crusher dusts, gas discharge (active	1-2.5 m/s (200- 500 f/min)
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).		2.5-10 m/s (500- 2000 f/min.)
	Within each range the appropriate value depends on:		
	Lower end of the range	Upper end of the range	
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	
	2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity	
	3: Intermittent, low production.	3: High production, heavy use	
	4: Large hood or large air mass in motion	4: Small hood - local control only	
	Simple theory shows that air velocity falls rapidly with distan- decreases with the square of distance from the extraction po adjusted, accordingly, after reference to distance from the cc a minimum of 1-2 m/s (200-400 f/min.) for extraction of solve mechanical considerations, producing performance deficits v multiplied by factors of 10 or more when extraction systems	bint (in simple cases). Therefore the air speed at the extract ontaminating source. The air velocity at the extraction fan, ents generated in a tank 2 meters distant from the extraction within the extraction apparatus, make it essential that theo	ction point should be for example, should b on point. Other
Individual protection measures, such as personal protective equipment			
Eye and face protection	<ul> <li>Safety glasses with side shields</li> <li>Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].</li> </ul>		
Skin protection	See Hand protection below		
Hands/feet protection	The selection of suitable gloves does not only depend on the manufacturer. Where the chemical is a preparation of severa advance and has therefore to be checked prior to the applicat The exact break through time for substances has to be obtain when making a final choice. Personal hygiene is a key element of effective hand care. Gl washed and dried thoroughly. Application of a non-perfumed Suitability and durability of glove type is dependent on usage if requency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN When prolonged or frequently repeated contact may occur, 240 minutes according to EN 374, AS/NZS 2161.10.1 or nati When only brief contact is expected, a glove with a protecti EN 374, AS/NZS 2161.10.1 or national equivalent) is recomm . Some glove polymer types are less affected by movement use. . Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gloves are . Excellent when breakthrough time > 480 min . Good when breakthrough time > 20 min . Fair when breakthrough time < 20 min . Poor when glove material degrades For general applications, gloves with a thickness typically gri It should be emphasised that glove thickness is not necessa permeation efficiency of the glove will be dependent on the efficiency of the glove will be dependent on the efficiency of the activity being conducted, gloves of v . Thinner gloves (down to 0.1 mm or less) may be required v only likely to give short duration protection and would norma . Thicker gloves (up to 3 mm or more) may be required wher or puncture potential Gloves must only be worn on clean hands. After using glove moisturiser is recommended.	al substances, the resistance of the glove material can not ation. Ined from the manufacturer of the protective gloves and ha loves must only be worn on clean hands. After using glove moisturiser is recommended. a. Important factors in the selection of gloves include: 374, US F739, AS/NZS 2161.1 or national equivalent). a glove with a protection class of 5 or higher (breakthroug ional equivalent) is recommended. ion class of 3 or higher (breakthrough time greater than 60 mended. and this should be taken into account when considering gl rated as: eater than 0.35 mm, are recommended. rily a good predictor of glove resistance to a specific cherr exact composition of the glove material. Therefore, glove s wledge of breakthrough times. ufacturer, the glove type and the glove model. Therefore, t e selection of the most appropriate glove for the task. varying thickness may be required for specific tasks. For e where a high degree of manual dexterity is needed. Howen Ily be just for single use applications, then disposed of. re there is a mechanical (as well as a chemical) risk i.e. wf	be calculated in is to be observed s, hands should be gh time greater than minutes according to oves for long-term ical, as the election should also he manufacturers xample: rer, these gloves are here there is abrasion
	moisturiser is recommended.		
Body protection	See Other protection below		

#### **Respiratory protection**

Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Version No: 3.1

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1	-
up to 50	1000	-	A-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	A-2
up to 100	10000	-	A-3
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

• Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

#### **SECTION 9** Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance	Clear liquid with ester like odor; partially mixes with water. Clear		
Physical state	Liquid	Relative density (Water = 1)	0.9-0.97
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	20.6 – 320
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	= 225 (ASTM D-92)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	<0.1 mmHg	Gas group	Not Available
Solubility in water	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	>1	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

#### **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

#### **SECTION 11 Toxicological information**

#### Information on toxicological effects

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

Version No: 3.1 h) STOT - Single Exposure Based on available data, the classification criteria are not met i) STOT - Repeated Exposure Based on available data, the classification criteria are not met j) Aspiration Hazard Based on available data, the classification criteria are not met The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal Inhaled models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack Ingestion of corroborating animal or human evidence. The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact Skin Contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient Eve discomfort characterised by tearing or conjunctival redness (as with windburn). Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using Chronic animal models); nevertheless exposure by all routes should be minimised as a matter of course. TOXICITY IRRITATION GulfSea PE Cooloil 32,46,68,100,170,220 Not Available Not Available Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: 🗙 – Data either no	t available or does not fill the criteria for classification

Data evaluable to make classification

#### Other information

Not Available

#### **SECTION 12 Ecological information**

#### Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
GulfSea PE Cooloil 32,46,68,100,170,220	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

#### DO NOT discharge into sewer or waterways.

# Persistence and degradability Ingredient Persistence: Water/Soil Persistence: Air No Data available for all ingredients No Data available for all ingredients Bioaccumulative potential Ingredient Bioaccumulation No Data available for all ingredients No Data available for all ingredients Mobility in soil Ingredient Mobility Ingredient Mobility No Data available for all ingredients

#### Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

#### **SECTION 13 Disposal considerations**

## Waste treatment methods Product / Packaging disposal Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Reuse

Recycling

#### Issue Date: 27/09/2023 Print Date: 07/05/2025

<ul> <li>Disposal (if all else fails)         This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.     <ul> <li>Do NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Authority for disposal.</li> <li>Bury or incinerate residue at an approved site.</li> <li>Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul> </li></ul>
--

#### **SECTION 14 Transport information**

Labels Required		
Marine Pollutant	NO	

#### Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

#### Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

#### Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7. Maritime transport in bulk according to IMO instruments

#### 14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

#### 14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
4470 Transmontin bullting	accordance with the ICC Code

#### 14.7.3. Transport in bulk in accordance with the IGC Code

Product name Ship Type

#### **SECTION 15 Regulatory information**

#### Safety, health and environmental regulations / legislation specific for the substance or mixture

Additional Regulatory Information

Not Applicable

#### National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non- Industrial Use	Not Available
Canada - DSL	Not Available
Canada - NDSL	Not Available
China - IECSC	Not Available
Europe - EINEC / ELINCS / NLP	Not Available
Japan - ENCS	Not Available
Korea - KECI	Not Available
New Zealand - NZIoC	Not Available
Philippines - PICCS	Not Available
USA - TSCA	Not Available
Taiwan - TCSI	Not Available
Mexico - INSQ	Not Available
Vietnam - NCI	Not Available
Russia - FBEPH	Not Available
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

#### **SECTION 16 Other information**

Revision Date	27/09/2023
Initial Date	07/08/2023

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be

Part Number: Version No: 3.1

considered.

### Page 8 of 8 GulfSea PE Cooloil 32,46,68,100,170,220