

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product Identifier	PAL DRIL LO
Other Means of Identification	Oil well drilling fluid additive
Recommended Use of Chemical and Restrictions on Use	
Supplier Details	Oren Hydrocarbon Middle East Fzco. P.O. Box 18159 Jebel Ali Free Zone (South) Dubai, UAE Tel: +971 4 8860497 Fax: +971 4 8860498
Emergency Phone Number	Tel: +971 4 8860497

2. HAZARDS IDENTIFICATION

Classification of the Substance / Mixture	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Label Elements Including Precautionary Statements	Hazard Pictogram(s): None Signal Word: None Hazard statement(s): None Precautionary statements: None
Hazards Not Otherwise Classified:	None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / mixture: Mixture

Component	CAS No.	Weight (%)
Fatty acid derivative	--	10 – 30
Aliphatic hydrocarbon	--	60 – 100

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4. FIRST AID MEASURES

First Aid Measures	Inhalation: Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.
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Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues

Ingestion: Do not induce vomiting. Rinse out mouth. Consult medical personnel or poison center.

Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention if any discomfort continues.

Most Important Symptoms / Effects, Acute and Delayed

Acute effects: Refer to the toxicological data in Section 11 of this safety data sheet.

Delayed effects: No specific data.

Indication of Immediate Medical Attention and Special Treatment Needed

Note to physician: Treat symptomatically.

Specific treatments: Specific treatment must be based on judgement of the physician in response to reactions of the patient.

Protection of first aiders: No action shall be taken involving any personal risk without suitable training.

5. FIREFIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: All standard firefighting media.

Extinguishing media which must not be used for safety reasons: None known

Special Hazards Arising from the Substance or Mixture

Oxides of Carbon and Nitrogen.

Special Protective Equipment and Precautions for Firefighters

Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions: Do not allow to enter drains, sewers or watercourses.

Methods and Materials for Containment and Cleaning Up

Evacuate surrounding area, if necessary. Keep personnel removed and upwind of spill. Extinguish all ignition sources. Avoid sparks, flames, heat, and smoking. Note that flammable vapors may form an ignitable mixture with air. Vapors may travel considerable distances and flash back if ignited. Stop leak, if possible, without risk. Dike far ahead of larger spills for later disposal. Absorb spillage with suitable absorbent material. Place into containers for disposal. Use non-sparking or explosion proof means to transfer material to containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Protective measures: Put on appropriate personal protective equipment. Avoid inhalation of vapours/spray and contact with skin and eyes. Use only in a well-ventilated area. Wash hands often and change clothing when needed.

Advice on general occupational hygiene: Wash hands after handling and before eating. Avoid prolonged exposure. All handling to take place in well-ventilated area. Shower after work. Remove and wash contaminated clothing promptly. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage, Including Any Incompatibilities

Avoid prolonged exposure to extreme heat and air. Store in cool dry place. Store in following materials: carbon steel, stainless steel, polypropylene, polyethylene-lined container, Teflon, glass-lined container, aluminum. Storage period is 24 months steel drums, six (6) months bulk.

Store in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding shrink-wrapping and/or stacking.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational exposure limits:

Product / ingredient Name	ACGIH TLV	OSHA PEL	Others
Fatty acid derivative	NA	NA	None
Aliphatic hydrocarbon	5 mg/m ³	5mg/m ³	None

Appropriate Engineering Controls

Provide general ventilation to control airborne levels below the exposure guidelines. Local exhaust and ventilation may be necessary for enclosed operations. If material is heated or sprayed, use approved air-purifying respirators.

Individual Protection Measures, Such as Personal Protective Equipment

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and / or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye / face protection: Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hand protection: Use protective gloves made of: Nitrile Rubber or Neoprene

Body protection: Use clean body-covering clothing to ensure skin contact does not occur.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: All the respiratory protection equipment should be used within a comprehensive respiratory protection program that requirement of 29 CFR 1910.134 if exposed to airborne mist/aerosol of this product, use at least a NIOSH-approved N95 half-mask disposable or re-usable particulate respirator. In work environments containing oil mist/aerosol, use at least a NIOSH approved P95 half-mask disposable or reusable particulate respirator

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow to brown liquid.
Odor	Hydrocarbon.
Odor Threshold	Not available.
pH	Not available.
Melting Point / Freezing Point	Not available.
Initial Boiling Point and Boiling Range	Not available.
Flash Point	>200° F (Closed Cup).
Evaporation Rate	Not available.
Flammability (solid, gas)	Not available.
Upper / Lower Flammability or Explosive Limits	Not available.
Vapor Pressure	Not available.
Vapor Density	Not available.
Specific Gravity	0.82– 0.86
Solubility	Insoluble.
Partial coefficient (n-octanol / water)	Not available.
Auto-ignition Temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Max 16.0 @ 40° C.
Cloud point	Max -10° C.

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical Stability	Stable under typical use, storage, and temperature conditions.
Possibility of Hazardous Reactions	Will not occur under normal use and storage conditions.

Conditions to Avoid	Avoid heat, spark and flame.
Incompatible Materials	Oxidizers.
Hazardous Decomposition Products	Oxides of Carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute toxicity:

Product / ingredient Name	CAS Number	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LD ₅₀
Aliphatic hydrocarbon	--	>39.9 g/kg (rat)	2.0 – 4.0 g/kg (rabbit)	>24.1 mg/l/1H (rat)

Irritation / Corrosion: Not Classified

Sensitization: Not Classified

Mutagenicity: Not Classified

Carcinogenicity: Not Classified

Reproductive toxicity: Not Classified

Teratogenicity: Not Classified

Specific target organ toxicity (single exposure): Not Classified

Specific target organ toxicity (repeated exposure): Not Classified

Aspiration hazard: Not Classified

Information on Likely Routes of Exposure

Routes of entry anticipated: Oral; dermal, inhalation.

Inhalation: vapors or mists may cause respiratory tract irritation

Skin contact: May cause skin irritation. May be harmful if absorbed through skin.

Eye contact: May be irritating to the eyes. May cause severe eye injury.

Ingestion: May cause gastric distress, nausea and vomiting if ingested.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation: No specific data.

Skin contact: No specific data.

Eye contact: No specific data.

Ingestion: No specific data..

Delayed and Immediate Effects, and also Chronic Effects From Short and Long-term Exposure

See Information on Toxicological Effects in this section of the safety data sheet.

Numerical Measures of Toxicity

Acute toxicity estimate: Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product/ingredient name.	Result
Aliphatic hydrocarbon	LC ₅₀ 48H static: 7500 ug/l (Danio rerio (zebra daniel)); LC ₅₀ 4D static: 5900 ug/l (Iepomis macrochirus (bluegill)); LC ₅₀ 24H

	static: 3200 ug/l (Oncorhynchus my kiss (rainbow trout)); LC ₅₀ 48H static: 8800 ug/l (poecilia reticulata (guppy))
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Persistence and Degradability Data not available.

Bioaccumulative Potential Data not available.

Mobility in Soil Data not available.
Other Adverse Effects

13. DISPOSAL CONSIDERATIONS

Description of Waste Residues and Information on Their Safe Handling and Methods of Disposal, Including the Disposal of Any Contaminated Packaging Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

14. TRANSPORT INFORMATION

UN Number Not regulated.

UN Proper Shipping Name Not regulated.

Transport classes Not regulated.

Packing Group Not regulated.

Environmental Hazards Not applicable.

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code) Not applicable.

Special Precautions For User Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

International Inventories	Australia (AICS):	Not determined.
	Canada (DSL):	All components are listed or exempted.
	China (IECSC):	Not determined.
	European Union (EINECS / ELINCS):	Not determined.
	Japan (ENCS):	Not determined.
	New Zealand (NZIoC):	Not determined.
	Philippines (PICCS):	Not determined.
	South Korea (KECL):	Not determined.
	Taiwan (NECI):	Not determined.

16. OTHER INFORMATION

Prepared By	Product Safety Committee
Revision Number	2.01
Revision Date	24 March 2023
Updates from Previous Revision	Updated Section 2 Hazard Identification

Disclaimer

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Acronyms and Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstract Services (division of the American Chemical Society)
CDR	Chemical Data Reporting
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DSL	Domestic Substances List
EC ₅₀	Half Maximal Effective Concentration
EINECS / ELINCS	European Inventory of Existing Chemical Substances / European List of Notified Chemical Substances
ENCS	Existing and New Chemical Substances
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
KECL	Korean Existing Chemical List
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships
mg/kg	Milligram per kilogram
mg/l	Milligram per liter
mg/m ³	Milligram per cubic meter
MSHA	Mine Safety and Health Administration
NECI	National Existing Chemical Inventory
NIOSH	National Institute for Occupational Safety and Health
NZIOC	New Zealand Inventory of Chemicals
OSHA	Occupational Safety and Health Administration, U.S. Department of Labor
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time-weighted Average

END OF SAFETY DATA SHEET