

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

<b>Product Identifier</b>	<b>PAL LIGNO CF</b>
<b>Other Means of Identification</b>	None.
<b>Recommended Use of Chemical and Restrictions on Use</b>	Oil well drilling fluid additive. Dispersant
<b>Supplier Details</b>	<b>Oren Hydrocarbon Middle East Fzco.</b> P.O. Box 18159 Jebel Ali Free Zone (South) Dubai, UAE Tel: +971 4 8860497 Fax: +971 4 8860498
<b>Emergency Phone Number</b>	Tel: +971 4 8860497

### 2. HAZARDS IDENTIFICATION

<b>Classification of the Substance / Mixture</b>	This material is not considered hazardous under the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
<b>Label Elements Including Precautionary Statements</b>	<b>Hazard Pictogram(s):</b> None applicable  <b>Signal Word:</b> None applicable <b>Hazard statement(s):</b> None applicable <b>Precautionary statements:</b> None applicable
<b>Hazards Not Otherwise Classified:</b>	None known.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Substance / mixture:** Mixture

Component	CAS No.	Weight (%)
Chrome Free Lignosulphonate	Various	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.

**Skin contact:** Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

**Eye contact:** 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:** Drink a couple of glasses of water or milk. Do not induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. Get medical attention.

#### Most Important Symptoms / Effects, Acute and Delayed

**Acute effects:** No specific data.  
**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.

#### Special Hazards Arising from the Substance or Mixture

**Extinguishing media which must not be used for safety reasons:** No specific data.  
 Oxides of Carbon, Sulfur and Chromium fumes.

#### 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

Use appropriate protective equipment. See Section 8 of this safety data sheet for additional information.

**Environmental precautions:** Do not contaminate drainage or waterways. Waste must be disposed of in accordance with federal, state and local laws. Repackage or recycle if possible.

#### Methods and Materials for Containment and Cleaning Up

Avoid generating and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water. Do not contaminate drainage or waterways. Repackage or recycle if possible.

### 7. HANDLING AND STORAGE

#### Precautions for Safe Handling

**Protective measures:** Avoid handling causing generation of dust. Wear full protective clothing for prolonged exposure and/or high concentrations. Eye wash emergency shower must be available at the work place. Wash hands often and change clothing when needed. Provide good ventilation. Mechanical ventilation or local exhaust ventilation is required.

**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

Store at moderate temperatures in dry, well ventilated area. Keep in original container. 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:** No exposure limits noted for the ingredients.

#### Appropriate Engineering Controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and risk-elimination area.

#### Individual Protection Measures, Such as Personal Protective Equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

**Hygiene measures:** Wash promptly with soap and water if skin becomes contaminated. Change work clothing daily if there is any possibility of contamination.

**Eye / face protection:** Wear approved chemical safety goggles where eye exposure is reasonably probable. Use tight fitting goggles if dust is generated.

**Hand protection:** Use suitable protective gloves if risk of skin contact.

**Body protection:** Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

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

**Respiratory protection:** Use at least a NIOSH-approved N95 half-mask disposable or reusable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half mask disposable or reusable particulate respirator. For exposures exceeding 10x PEL use a NIOSH-approved N100 particulate respirator.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Brown powder.

#### Odor

Mild.

#### Odor Threshold

Not available.

<b>pH</b>	5.0 – 7.0.
<b>Melting Point / Freezing Point</b>	> 125 °C.
<b>Initial Boiling Point and Boiling Range</b>	Not available.
<b>Flash Point</b>	Not available.
<b>Evaporation Rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper / Lower Flammability or Explosive Limits</b>	Not available.
<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Specific Gravity</b>	Not available.
<b>Solubility</b>	Soluble in water.
<b>Partial coefficient (n-octanol / water)</b>	Not available.
<b>Auto-ignition Temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	Not available.

### 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not expected to be reactive.
<b>Chemical Stability</b>	Stable under normal conditions.
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Avoid heat
<b>Incompatible Materials</b>	Strong oxidizing substances.
<b>Hazardous Decomposition Products</b>	None known.

### 11. TOXICOLOGICAL INFORMATION

<b>Information on Toxicological Effects</b>	<b>Acute toxicity:</b> No information available
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**Irritation / Corrosion:** No information available

**Sensitization:** No information available

**Mutagenicity:** No information available

**Carcinogenicity:** No information available

**Reproductive toxicity:** No information available.

**Teratogenicity:** No information available.

**Specific target organ toxicity (single exposure):** No information available

**Specific target organ toxicity (repeated exposure):** No information available

**Aspiration hazard:** Not applicable.

### Information on Likely Routes of Exposure

**Routes of entry anticipated:** Oral; dermal, inhalation.

**Inhalation:** No specific data.

**Skin contact:** No specific data.

**Eye contact:** No specific data.

**Ingestion:** No specific data.

### Symptoms Related to the Physical, Chemical and Toxicological Characteristics

**Inhalation:** May be irritating to the respiratory tract if inhaled.

**Skin contact:** May be irritating to the skin.

**Eye contact:** May be irritating to the eyes.

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

### 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** No information available.

**Persistence and Degradability** No information available.

**Bioaccumulative Potential** No information available.

**Mobility in Soil** No information available.

**Other Adverse Effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Description of Waste Residues and Information on Their Safe Handling

This product does not meet the criteria of a hazardous waste if discarded in its purchased form. Under U.S. Environmental Protection Agency (EPA) Resource

**and Methods of Disposal, Including the Disposal of Any Contaminated Packaging**

Conservation Recovery Act ( RCRA), and it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. Should this product become a waste, dispose in accordance with federal, state, and local regulations

### 14. TRANSPORT INFORMATION

<b>UN Number</b>	Not regulated.
<b>UN Proper Shipping Name</b>	Not regulated.
<b>Transport classes</b>	Not regulated.
<b>Packing Group</b>	Not regulated.
<b>Environmental Hazards</b>	Not applicable.
<b>Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

### 15. REGULATORY INFORMATION

<b>International Inventories</b>	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.
	United States (TSCA):	All components are listed or exempted.

### 16. OTHER INFORMATION

<b>Prepared By</b>	Product Safety Committee
<b>Revision Number</b>	2.00
<b>Revision Date</b>	04 August 2022
<b>Updates from Previous Revision</b>	Updated all section to GHS format
<b>Disclaimer</b>	

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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 <sub>50</sub>	Half Maximal Effective Concentration
EINECS / ELINCS	European Inventory of Existing Chemical Substances / European List of Notified Chemical Substances
ENCS	Existing and New Chemical Substances
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
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 <sup>3</sup>	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
ppm	Part per million
SARA	Superfund Amendments and Reauthorization Act
TWA	Time-weighted Average

**END OF SAFETY DATA SHEET**