

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

Product Identifier	PAL TEMP
Other Means of Identification	Not applicable.
Recommended Use of Chemical and Restrictions on Use	Fluid Loss Reducer.
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 under the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
Label Elements Including Precautionary Statements	Hazard Pictogram(s): Non-Applicable Signal Word: Non-Applicable Hazard statement(s): None- Applicable Precautionary statements: None - Applicable
Hazards Not Otherwise Classified:	None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / mixture: Substance.

Component	CAS No.	Weight (%)
LINGNOSULFONATE POLYMER	--	60 – 100%
QUARTZ, CRYSTALLINE, SILICA	14808-60-7	0 – 3%

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 victim away from source of exposure and into fresh air. Get medical attention if any discomfort continues.

Skin contact: Remove contaminated clothing. Wash skin through with soap and water. Seek immediate 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: First aid is not required. Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

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. Not applicable.

Special Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use appropriate protective equipment. Avoid creating and breathing dust. See Section 8 of this safety data sheet for additional information.

Environmental precautions: Prevent from entering sewers, waterways, or low areas.

Methods and Materials for Containment and Cleaning Up

Avoid the generation of dusts during clean-up. Remove all sources of ignition; non-sparking tools should be used. Collect dust using a vacuum cleaner equipped with high efficiency particulate arrestee (HEPA) filter. Stop the flow of material, if this is without risk. Do not allow to enter sewer or subsurface waters.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Protective measures: Do not get in eyes, on skin or on clothing. Use only in a well-ventilated area.

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 in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks, and flames. Store away from incompatibles.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational exposure limits:

Product / ingredient Name	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Silica, crystalline, quartz	14808-60-7	$\frac{10 \text{ mg/m}^3}{\% \text{SiO}_2 + 2}$	TWA: 0.025 mg/m ³

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: 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 safety glasses or goggles to protect against exposure.

Hand protection: Normal work gloves.

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

Respiratory protection: Wear a NIOSH certified respirator when using this product. All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Dark brown, blackish powder.

Odor

Slight.

Odor Threshold	Not available.
pH	8.8 – 9.2.
Melting Point / Freezing Point	Not available.
Initial Boiling Point and Boiling Range	Not available.
Flash Point	Not available.
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	0.98 – 1.2
Solubility	Not available.
Partial coefficient (n-octanol / water)	Not available.
Auto-ignition Temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.

10. STABILITY AND REACTIVITY

Reactivity	Not expected to be reactive.
Chemical Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	None known.
Incompatible Materials	Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products	Asphyxiating gases/vapors/fumes of: Ammonia or amines. Oxides of Carbon. Sulphur.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects	Acute toxicity:
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Product / ingredient Name	CAS Number	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LD ₅₀
Silica, crystalline, quartz	14808-60-7	500 mg/kg (rat)	No data available	No data available
		>15000 mg/kg (human)		

Irritation / Corrosion:

Product / ingredient name	CAS Number	Test	Result
Silica, crystalline, quartz	14808-60-7	Skin	Non-irritating
		Eye	Mechanical irritation possible

Sensitization: No information available

Mutagenicity:

Product / ingredient name	CAS Number	Result
Silica, crystalline, quartz	14808-60-7	Not regarded as mutagenic

Carcinogenicity: No information available

Reproductive toxicity: No information available.

Teratogenicity: No information available.

Specific target organ toxicity (single exposure):

Product / ingredient name	CAS Number	Result
Silica, crystalline, quartz	14808-60-7	No significant toxicity observed in animal studies at concentration requiring classification

Specific target organ toxicity (repeated exposure):

Product / ingredient name	CAS Number	Result
Silica, crystalline, quartz	14808-60-7	Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled

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: Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects.

Skin contact: May cause mechanical skin irritation.

Eye contact: May cause mechanical irritation to eye.

Ingestion: None known.

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	CAS Number	Algae	Fish	Invertebrates
Silica, crystalline, quartz	14808-60-7	-	LL ₀ (96h) 10,000 mg/l (<i>Danio rerio</i>) (similar substance)	LL ₅₀ (24h) >10,000 mg/l (<i>Daphnia magna</i>) (similar substance)

Persistence and Degradability

The methods for determining biodegradability are not applicable to inorganic substances.

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

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of in an authorized landfill in accordance with local regulation. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

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.
	United States (TSCA):	All components are listed or exempted.

16. OTHER INFORMATION

Prepared By	Product Safety Committee
Revision Number	2.01
Revision Date	05 September 2023
Updates from Previous Revision	Updated all section 2

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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
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 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
ppm	Part per million
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time-weighted Average

END OF SAFETY DATA SHEET