



MATERIAL SAFETY DATA SHEET

PAO^{DECAT}

POLYALPHAOLEFIN

(DECAT^{PT} TREATED)

1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Name:	Polyalphaolefin (DECAT ^{PT} TREATED)
Product Code:	PAO ^{DECAT}
Revised:	18-May-2018
Application:	Active Ingredient for finished DRA product
Manufacturer:	Lonron Petroleum Technology Company No. 8A Zijing Rd., Yongqing Industrial Park, Langfang, Hebei, China
Emergency Tel.:	+86-137-2265-3000 +86-316-569-1307/8

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS	%
Polyalphaolefin	68037-01-4	95~97
Stearamide	124-26-5	3~5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Appearance / Odor

Colorless or yellowish granule / odorless.

OSHA Regulatory Status

This material is classified as hazardous as defined under OSHA regulations.
Non-Flammable solid. See below for health hazards.

HMIS Rating

Health: 1(Slight); Flammability: 1(Moderate); Reactivity: 0 (Least)

Most Important Hazards

Inhalation may result in respiratory irritation. Prolonged or repeated contact may cause skin irritation. Prolonged contact may cause allergic skin reactions.

POTENTIAL HEALTH EFFECTS:

Inhalation:

Exposure to dust particles generated from this material may cause irritation of the respiratory tract. Exposure to high concentrations may cause coughing and difficulty breathing.

Ingestion:

No adverse health effects are expected from swallowing.

Skin Contact:

Prolonged or repeated contact may cause skin irritation. Prolonged contact may cause allergic skin reactions.

Eye Contact:

Large amounts of dust may cause mechanical irritation.

4. FIRST AID MEASURES

Inhalation

In case of inhalation, seek fresh air immediately. If breathing is difficult, get medical attention.

Skin Contact

In case of contact, wash skin with soap and water. Wash contaminated clothing before reuse.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Never introduce ointment or oil into the eyes without medical advice! If pain is present, refer the victim to an ophthalmologist for treatment and follow up.

Ingestion

No adverse health effects are expected from swallowing.

5. FIRE FIGHTING MEASURES

General information

As in any fire, wear a self-contained breathing apparatus in pressure-demand and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Suitable extinguishing agents

In case of fire, use water spray, sand, carbon dioxide or powdered extinguishing agent. Special hazards caused by the material are its products of combustion or resulting gases, i.e., Carbon monoxide (CO) and Carbon dioxide (CO₂)

Protective equipment

Mount respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES**Person-related safety precautions**

Use proper personal protective equipment as Exposure controls and personal protection.

Measures for environmental protection

Do not allow to enter sewers/ surface or ground water.

Small Spill

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill

Use a shovel to put the material into a convenient waste disposal container. Be careful that the product is not present at a concentration level above TLV.

7. HANDLING AND STORAGE**Handling (Personnel)**

Avoid breathing dust particles generated from this material.

Prevent contact with skin or eyes.

Wash thoroughly after handling.

Wash contaminated clothing prior to reuse.

Storage

Avoid UV and direct sun exposure.

Store in sealed containers, cool and ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering Controls****VENTILATION**

General ventilation is adequate.

Personal Protective Equipment**RESPIRATORY PROTECTION**

Use appropriate NIOSH-approved organic vapor respiratory protection if exposure limits are exceeded, or overexposure is likely.

PROTECTIVE GLOVES

Wear protective gloves when any potential exists for skin contact. NBR or neoprene recommended.

EYE/FACE PROTECTION

Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying materials.

OTHER PROTECTIVE MEASURES

Impervious protective clothing such as apron or chemical suit should be worn if splashing is possible. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid Granule (MAX Size 20X20mm)
Melting Point, °C	>200
Odor	Odorless
Color	Colorless or Yellowish
Specific Gravity	0.830
Molecular Weight	>7M Dalton
Self-igniting	Product is not self-igniting
Danger of explosion	Product does not present an explosion hazard

10. STABILITY AND REACTIVITY

Conditions to avoid

Direct exposure to UV or sunlight.

Materials to avoid

Contact with hydrocarbons.

Hazardous reactions

Hazardous polymerization does not occur.

Hazardous decomposition products

Decomposition temperature: > 200 °C

Decomposition products: carbon monoxide (CO), carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Toxicity

Low toxicity.

Primary irritant effect

On the skin: Low, prolonged and/or repeated skin contact may defat skin and possibly cause dermatitis.

On the eye: Low, reversible irritation.

Sensitization

None known.

Additional toxicological information

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. ECOLOGICAL INFORMATION

Eco-toxicological Information

N/A.

BOD5 and COD

N/A.

Products of Biodegradation

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

14. TRANSPORTATION INFORMATION

ROAD/RAIL

Other Not regulated for transport.

SEA

Not regulated for transport.

Air

Not regulated for transport.

15. REGULATORY INFORMATION**WHMIS (Canada)**

Not controlled under WHMIS.

DSCL (EEC)

This product is not classified according to the EU regulations.

HMIS

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

National fire protection association (USA)

Health: 1

Flammability: 1

Reactivity: 0

16. OTHER INFORMATION

DECAT^{PT} is a proprietary technology developed by **LONRON CHEMICAL** to treat or stabilize polyalphaolefin upon the completion of polymerization. Polyalphaolefin after treated or stabilized by **DECAT^{PT}** will not further decompose or degrade with time and thus will maintain its molecular structure intact as designed. As a result, the **DECAT^{PT}** treated polyalphaolefin will keep its drag reduction performance constant for a long term. In another word, the drag reduction performance of the **DECAT^{PT}** treated polyalphaolefin will not decrease with time while the drag reduction performance of non **DECAT^{PT}** treated polyalphaolefin will usually decrease with time. The **DECAT^{PT}** treated polyalphaolefin is referred to as **PAO^{DECAT}**, boasting stable drag reduction performance.

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