

PRODUCT BACKGROUNDER

Pyrolysis Fuel Oil (PFO)

Important! For detailed information on this product and emergency measures, obtain the Canadian Safety Data Sheet (<u>SDS)</u>/ U.S. Safety Data Sheet (<u>SDS</u>). In the case of an emergency, please call our 24-hour hotline at 1-800-561-6682 or 1-403-314-8767.

May also be called: PFO-Joffre, Heavy Fuel Oils

Product/Substance Use:

- This product is a complex mixture of naphthalene, polycyclic aromatic hydrocarbons, indene, and dicyclopentadiene, manufactured at NOVA Chemicals' Joffre, Alberta facility and shipped by railcar.
- This product is used as chemical intermediate feedstock or industrial fuel.

Characteristics and Safe Handling:

- This product is a dark coloured, oily liquid with a pungent odour whose odour threshold is < 1 ppm.
- This product is classified as a flammable liquid, health and environmental hazard in the workplace and as flammable for transportation.
- Any equipment used in areas of handling or storage of the heated product must be approved for flammable liquids and properly grounded for control of static electricity.
- If released from containment, product may be ignited by uncontrolled heat, sparks or flames. Containers exposed to fire conditions may explode.
- Material burns readily when heated, and sparks or flames may ignite released hot liquids, vapours or mists. The vapor is heavier than air and may collect in low areas Ignition from a distant source with flashback is possible.
- Any release to land or water must be isolated, controlled to avoid ignition, contained and recovered or cleaned up by properly trained and equipped personnel.

Health and Safety Information:

- Wear all recommended personal protective equipment if any contact with this material is likely. Immediately remove and clean any contaminated clothing and shoes prior to reuse.
- Contact with material may cause serious eye irritation and skin irritation.
- This product is harmful if inhaled. Symptoms include vomiting, nausea, abdominal pain and central nervous system effects.
- Product may be fatal if swallowed and enters airways. During vomiting, minute amounts of material can be inhaled causing chemical pneumonia. Ingestion may also cause blood disorders.
- This product contains: naphthalene known to cause eye damage, skin damage, possible blood, liver and kidney damage and may cause cancer, polycyclic aromatic hydrocarbons (PAH) which may cause cancer, benzene up to 5% and is known to cause cancer leukemia and xylene up to 1% and was classified as a developmental toxicant in Canada.

Environmental Information:

- Pyrolysis Fuel Oil does not readily evaporate, although the product has some volatile components. Product will partition largely between the air, water, and soil compartments, with a negligible amount partitioning to sediment.
- Product is considered toxic to aquatic life and will accumulate on the surface of plants, waterfowls and mammals, resulting in serious injury
 and possible death.
- Components of this product are expected to biodegrade in the environment under both aerobic and anaerobic conditions. Soil remediation may be required for large spills. Some trace PAH components are known to persist and bioaccumulate.
- Associated wastes may be regulated in Canada and in the United States. Ensure applicable regulations are met.

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For more information on this, or any other NOVA Chemicals' product, please contact us at the nearest location below during business hours or visit our website at <u>www.novachemicals.com</u>:

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