

PRODUCT BACKGROUNDER

Pyrolysis Fuel Oils (PFO)

Important! For detailed information on this product and emergency measures, obtain the Material Safety Data Sheet (MSDS). 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, PFO-Corunna, PETROCARB® Fuel Oil, Heavy Fuel Oils

Product/Substance Use:

- These products are complex mixtures of heavy hydrocarbons, manufactured at NOVA Chemicals' Joffre, Alberta and Corunna, Ontario facilities and shipped by railcars and trucks respectively.
- These products are used as chemical feedstocks or are burned as industrial fuels.

Characteristics and Safe Handling:

- Products are regulated in the workplace as irritating and toxic. Joffre's PFO is flammable for transportation; whereas Corunna's PFO is an environmentally hazardous substance for transportation, and would be regulated as flammable for transportation if the loading temperature were to exceed the flash point.
- Joffre PFO is a dark coloured, oily liquid with a pungent odour. Corunna PFO is a dark brown to black coloured, thick liquid with a distinctive mothball-like odour.
- Any equipment used in areas of handling or storage of the heated products must be approved for combustible liquids for the Corunna PFO and flammable liquids for the Joffre PFO and properly grounded for control of static electricity.
- If released from containment, products may be ignited by uncontrolled heat, sparks or flames. Containers exposed to fire conditions may explode.
- Materials burn readily when heated, and sparks or flames may ignite released hot liquids, vapours or mists. Ignition from a distant source with flashback is possible.
- Any release to land or water must be isolated, contained, controlled to avoid ignition, and/or cleaned up by properly trained and equipped personnel.

Health and Safety Information:

- Wear all recommended personal protective equipment if any contact with these materials is likely. Immediately remove and clean any contaminated clothing and shoes prior to reuse.
- Contact with material may cause irritation to the eyes and skin and is harmful to the skin. Flush immediately out of eyes and/or off of skin. Prolonged and/or repeated skin contact with these products may cause irritation, dermatitis, chemical blistering and sensitization reactions. Products contain polynuclear aromatic hydrocarbons (PAH), which may be carcinogenic on prolonged contact with skin.
- Contact with hot product can cause severe eye irritation or damage and severe burns to the skin. Seek immediate medical attention.
- This product is harmful if inhaled. Ensure adequate ventilation is available. Breathing heated vapours or mists may cause irritation. With prolonged inhalation, headache, light-headedness, drowsiness, nausea, loss of coordination, liver and kidney damage, heartbeat irregularities, and blood disorders may occur. If extended contact occurs (usually in an enclosed space), unconsciousness or death is possible.
- If accidentally swallowed, DO NOT INDUCE VOMITING. Aspiration of liquid into lungs may cause chemical pneumonia. Seek immediate medical attention.
- These products contain naphthalene, which is known to cause corneal damage, optical neuritis, skin sensitization, possible blood, liver and kidney damage and is a suspect carcinogen. Joffre PFO contains up to 5% benzene (which is a confirmed human carcinogen - leukemia) and up to 1% xylene (which is considered to be a developmental toxicant in Canada).

Environmental Information:

- Pyrolysis Fuel Oils do not readily evaporate, although Joffre PFO has some volatile components. Product is sticky and will adhere to soils and sediment.
- Products are considered toxic to aquatic life and will "coat" the surface of plants, waterfowl, fish and other mammals resulting in serious injury and possible death.
- Components of these products are expected to biodegrade in the environment under both aerobic and anaerobic conditions. Hazardous short-term degradation products are not likely. Soil remediation may be required for large spills. Recovery time for impacted area following a major spill is estimated to extend into months, possibly years. Some trace PAH components are considered persistent and bioaccumulative toxins.
- 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 www.novachemicals.com:

NOVA Chemicals Corporation
PO Box 2518, Station M
Calgary, Alberta
Canada T2P 5C6
Tel: 403-750-3600

NOVA Chemicals Inc.
1555 Coraopolis Heights Road
Moon Township, PA.
USA 15108
Tel: 412-490-4000
Toll Free: 1-866-ASK-NOVA

NOVA Chemicals (International) S.A.
Avenue de la Gare 14
CH-1700 Fribourg
Switzerland
Tel: 41-26-426-57-57

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