

SAFETY DATA SHEET



Diesel Fuel No. 1

Section 1. Identification

GHS product identifier	Diesel Fuel No. 1
Chemical name	Fuels, diesel <input checked="" type="checkbox"/> Includes blends of Diesel Fuel No. 1 and No. 2 with flash point >38°C (>100°F)
Product code	11154
SDS #	11154
<u>Relevant identified uses of the substance or mixture and uses advised against</u>	
Use of the substance/ mixture	Fuel.
Manufacturer	BP Products North America Inc. 150 West Warrenville Road Naperville, Illinois 60563-8460 USA
Supplier	BP Products North America Inc. 150 West Warrenville Road Naperville, Illinois 60563-8460 USA
EMERGENCY HEALTH INFORMATION:	1 (800) 447-8735 Outside the US: +1 703-527-3887 (CHEMTREC)
EMERGENCY TELEPHONE NUMBER	1 (613) 996-6666 CANUTEC (Canada)

Section 2. Hazard identification

Classification of the substance or mixture	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bone marrow, liver, thymus) - Category 2 ASPIRATION HAZARD - Category 1
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GHS label elements

Hazard pictograms



Signal word

Danger

Hazard statements

H226 - Flammable liquid and vapor.
H332 - Harmful if inhaled.
H315 - Causes skin irritation.
H351 - Suspected of causing cancer.
H304 - May be fatal if swallowed and enters airways.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure.
(bone marrow, liver, thymus)

Precautionary statements

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Version 2	Date of issue 05/30/2018.	Format Canada
	(Canada)	Language ENGLISH (ENGLISH)

Section 2. Hazard identification

Prevention	<p>P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P260 - Do not breathe vapor. P280 - Wear protective gloves and eye protection. P273 - Avoid release to the environment.</p>
Response	<p>P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P332 + P313 - If skin irritation occurs, seek medical advice/attention.</p>
Storage	<p>P405 + P403 + P235 - Store locked up. Store in cool/well-ventilated place.</p>
Disposal	<p>P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</p>
Other hazards which do not result in classification	<p>This material may contain significant quantities of polycyclic aromatic hydrocarbons, some of which have been shown by experimental studies to induce skin cancer. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.</p>

Section 3. Composition/information on ingredients

Substance/mixture Mixture

May also contain small quantities of proprietary performance additives.

Ingredient name	CAS number	% (w/w)
Petroleum distillates	Varies = may contain one or more of the following	95 - 100
Petroleum distillates	68476-34-6	0 - 95
Petroleum distillates	8008-20-6	0 - 95
Contains one or more of the following biodiesels:	Varies	0 - 5
soybean oil, me ester	67784-80-9	-
Fatty acids, sunflower-oil, Me esters	68919-54-0	-
Fatty acid methyl esters	67762-38-3	-
Fatty acids, vegetable-oil, Me esters	68990-52-3	-
rape oil, me ester	73891-99-3	-
Fatty acids, canola-oil, Me esters	129828-16-6	-
fatty acids, tallow, me esters	61788-61-2	-
naphthalene	91-20-3	0.0242 – 0.13

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact	<p>In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.</p>
Skin contact	<p>In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Clean shoes thoroughly before reuse. Get medical attention.</p>

Section 4. First-aid measures

Inhalation

☑ Inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. If exposure to vapor, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.

Ingestion

☑ Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Protection of first-aiders

☑ No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

☑ Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Specific treatments

☑ No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

☑ In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media

☑ Do not use water jet.

Specific hazards arising from the chemical

☑ Flammable liquid and vapor. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

☑ Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
other hazardous substances.

Special protective actions for fire-fighters

☑ No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

☑ Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

☑ Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources.

Section 6. Accidental release measures

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.

Methods and materials for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to

Section 8. Exposure controls/personal protection

<p>naphthalene</p>	<p>STEL: 150 mg/m³ 15 minutes. Issued/Revised: 8/2007 Form: vapour TWA: 100 mg/m³ 8 hours. Issued/Revised: 8/2007 Form: vapour</p> <p>CA Alberta Provincial (Canada). Absorbed through skin. 15 min OEL: 79 mg/m³ 15 minutes. Issued/Revised: 7/2009 15 min OEL: 15 ppm 15 minutes. Issued/Revised: 7/2009 8 hrs OEL: 52 mg/m³ 8 hours. Issued/Revised: 4/2004 8 hrs OEL: 10 ppm 8 hours. Issued/Revised: 4/2004</p> <p>CA British Columbia Provincial (Canada). Absorbed through skin. STEL: 15 ppm 15 minutes. Issued/Revised: 8/2004 TWA: 10 ppm 8 hours. Issued/Revised: 8/2004</p> <p>CA Ontario Provincial (Canada). Absorbed through skin. STEL: 15 ppm 15 minutes. Issued/Revised: 6/2015 TWA: 10 ppm 8 hours. Issued/Revised: 6/2015</p> <p>CA Quebec Provincial (Canada). STEV: 79 mg/m³ 15 minutes. Issued/Revised: 1/2000 STEV: 15 ppm 15 minutes. Issued/Revised: 1/2000 TWA EV: 52 mg/m³ 8 hours. Issued/Revised: 1/2000 TWA EV: 10 ppm 8 hours. Issued/Revised: 1/2000</p> <p>CA Saskatchewan Provincial (Canada). Absorbed through skin. STEL: 15 ppm 15 minutes. Issued/Revised: 8/2007 TWA: 10 ppm 8 hours. Issued/Revised: 8/2007</p>
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Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Recommended: Chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection

Wear chemical resistant gloves. Nitrile gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Body protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Wear suitable protective clothing.

Footwear highly resistant to chemicals.

When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.

When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.

When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.

Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use only with adequate ventilation. If ventilation is inadequate, use respirator that will protect against organic vapor and dust/mist.

If operating conditions cause high vapor concentrations or the TLV is exceeded, use supplied-air respirator.

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.

The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

Section 9. Physical and chemical properties

Appearance

Physical state

Liquid.

Color

Colorless. to Various Colors. (May be dyed Red., Light Green. ,Yellow.)

Odor

Petroleum

Odor threshold

0.7 ppm (Based on Fuels, diesel)

pH

Not applicable. Based on Solubility in water (Very slightly soluble in water)

Melting point

-29 to -18°C (-20.2 to -0.4°F) (Based on Fuels, diesel)

Boiling point

160 to 390°C (320 to 734°F)

Flash point

Closed cup: >38°C (>100°F) [Pensky-Martens.]

Pour point

Not available.

Section 9. Physical and chemical properties

Drop Point	Not available.
Evaporation rate	Not relevant/applicable due to nature of the product. Based on Low volatility
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Lower: 0.6% Upper: 7.5%
Vapor pressure	0.4 kPa (3 mm Hg) (Based on Concawe Category: Vacuum Gas Oils, Hydrocracked Gas Oils & Distillate Fuels (VHGO))
Vapor density	1 [Air = 1]
Density	815 to 840 kg/m ³ (0.815 to 0.84 g/cm ³)
Relative density	<1 [Water = 1]
Solubility	Very slightly soluble in water
Partition coefficient: n-octanol/water	Not applicable. Based on Fuels, diesel - Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.
Auto-ignition temperature	210°C (410°F)
Decomposition temperature	Not observed to decompose by final boiling point: >390°C (>734°F)
Viscosity	Kinematic: 1.3 to 2.4 mm ² /s (1.3 to 2.4 cSt) at 40°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. halogenated compounds.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Exposure	Remarks
Kerosene (petroleum)	LC50 Inhalation Vapor	Rat	>5.28 mg/l Mortality and Systemic Effects	4 hours	Based on Straight run kerosene
	LD50 Dermal	Rabbit	>2000 mg/kg Mortality and Systemic Effects	-	Based on Thermocracked kerosene
	LD50 Oral	Rat	>5000 mg/kg	-	Based on Thermocracked kerosene
Fuels, diesel, No 2	LC50 Inhalation Dusts and mists	Rat	4.1 mg/l	4 hours	Based on Diesel fuel
	LD50 Dermal	Rabbit	>4300 mg/kg	-	Based on No. 2

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naphthalene	LD50 Dermal	Rabbit	>4300 mg/kg	-	Heating Oil. Based on Diesel fuel
	LD50 Oral	Rat	17900 mg/kg	-	Based on No. 2 Heating Oil.
	LD50 Oral	Rat	7600 mg/kg	-	Based on Diesel fuel
	LC50 Inhalation Dusts and mists	Rat	>340 mg/m ³	1 hours	-
	LD50 Dermal	Rabbit	20 g/kg	-	-
	LD50 Oral	Rat	490 mg/kg	-	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result	Remarks
✓Kerosene (petroleum)	skin	Guinea pig	Not sensitizing	Based on Thermocracked kerosene
Fuels, diesel, No 2	skin	Guinea pig	Not sensitizing	Based on No. 2 Heating Oil.
	skin	Guinea pig	Not sensitizing	Based on Diesel fuel

Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
✓Kerosene (petroleum)	Equivalent to OECD 476	Experiment: In vitro Subject: Mammal - species unspecified	Negative	Based on Hydrodesulfurized kerosene
	Equivalent to OECD 476	Experiment: In vitro Subject: Mammal - species unspecified	Negative	Based on Hydrodesulfurized kerosene
	Equivalent to OECD 471	Experiment: In vitro Subject: Mammal - species unspecified	Negative	Based on Hydrodesulfurized kerosene
Fuels, diesel, No 2	Equivalent to OECD 475	Experiment: In vivo Subject: Non-mammalian species	Negative	Based on Straight run kerosene
	Equivalent to OECD 478	Experiment: In vivo Subject: Unspecified Cell: Germ	Negative	Based on Straight run kerosene
	OECD 471	Experiment: In vitro Subject: Unspecified Cell: Germ	Positive	Based on Diesel fuel
	Equivalent to OECD 476	Experiment: In vitro Subject: Non-mammalian species	Negative	Based on Heating Oil.
	not guideline	Experiment: In vivo Subject: Mammalian-Animal Cell: Germ	Negative	Based on Heating Oil.
		Experiment: In vivo Subject: Unspecified Cell: Somatic	Negative	Based on Heating Oil.

Conclusion/Summary

Based on available data, the classification criteria are not met.

Carcinogenicity

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Section 11. Toxicological information

Product/ingredient name	Species	Route	Exposure	Test	Result	Remarks
Kerosene (petroleum) Fuels, diesel, No 2	Mouse	Dermal	Positive - Dermal - Unspecified	2 years	-	Based on Jet Fuel
	Mouse	Dermal	Negative - Dermal - Unspecified	2 years	-	Based on Hydrotreated Kerosene
	Mouse	Dermal	Positive - Dermal - Unspecified	2 years	-	Based on Heating Oil.

Conclusion/Summary Suspected of causing cancer.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Result	Exposure
Kerosene (petroleum)	-	Negative	-	Rat	Dermal	34 days
	-	Negative	-	Rat	Oral	90 days
	-	-	Negative	Rat	Oral	10 days
Fuels, diesel, No 2	-	-	Negative	Rat	Inhalation	10 days
	-	-	Negative	Rat	Dermal	20 days
	-	-	Negative	Rat	Dermal	10 days
	-	-	Negative	Rat	Dermal	10 days

Conclusion/Summary Development: Not classified. Based on available data, the classification criteria are not met.
 Fertility: Not classified. Based on available data, the classification criteria are not met.
 Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Kerosene (petroleum)	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Fuels, diesel, No 2	Category 2	Not determined	bone marrow, liver and thymus

Aspiration hazard

Name	Result
Kerosene (petroleum) Fuels, diesel, No 2	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact

No known significant effects or critical hazards.

Skin contact

Causes skin irritation.

Inhalation

Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Ingestion

Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	Adverse symptoms may include the following: nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs. Vapor, mist or fume may irritate the nose, mouth and respiratory tract.
Potential delayed effects	Not available.

Long term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.

Potential chronic health effects

General	May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Carcinogenicity	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Additional information Middle distillate: From skin-painting studies of petroleum distillates of similar composition and distillate range, it has been shown that these types of materials often possess weak carcinogenic activity in laboratory animals. In these tests, the material is painted on the shaved backs of mice twice a week for their lifetime. The material is not washed off between applications. Therefore, there may be a potential risk of skin cancer from prolonged or repeated skin contact with this product in the absence of good personal hygiene. This particular product has not been tested for carcinogenic activity, but we have chosen to be cautious in light of the findings with other distillate streams.

Occasional skin contact with this product is not expected to have serious effects, but good personal hygiene should be practiced and repeated skin contact avoided. This product can also be expected to produce skin irritation upon prolonged or repeated skin contact. Personal hygiene measures taken to prevent skin irritation are expected to be adequate to prevent risk of skin cancer.

Section 11. Toxicological information

Diesel exhaust particulates have been classified by the National Toxicological Program (NTP) to be a reasonably anticipated human carcinogen. Exposure should be minimized to reduce potential risk.

Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Product/ingredient name	Species	Test/Result	Exposure	Effects	Remarks
Kerosene (petroleum)	Algae	EL50 1 to 3 mg/l Nominal Fresh water	72 hours	cell number	Based on Solvent naphtha (petroleum), heavy aromatic
	Micro-organism	LL50 677.9 mg/l Nominal Fresh water	72 hours	growth inhibition	Based on Kerosene
	Algae	LOEL 1 mg/l Nominal Fresh water	72 hours	cell number	Based on Solvent naphtha (petroleum), heavy aromatic
	Algae	NOEL 1 mg/l Nominal Fresh water	24 hours	cell number	Based on Solvent naphtha (petroleum), heavy aromatic
	Algae	NOEL 1 mg/l Nominal Fresh water	48 hours	cell number	Based on Solvent naphtha (petroleum), heavy aromatic
	Micro-organism	NOEL 1.641 mg/l Nominal Fresh water	72 hours	growth inhibition	Based on Kerosene
	Daphnia	Acute EL50 1.4 mg/l Nominal Fresh water	48 hours	Mobility	Based on Kerosene (petroleum), hydrodesulfurized
	Fish	Acute LL50 2 to 5 mg/l Fresh water	96 hours	Mortality	Based on Heavy aromatic solvent naphtha
	Daphnia	Acute NOEL 0.3 mg/l Nominal Fresh water	48 hours	Mobility	Based on Kerosene (petroleum), hydrodesulfurized

Section 12. Ecological information

	Fish	Acute NOEL 2 mg/l Fresh water	96 hours	Mortality	Based on Solvent naphtha (petroleum), heavy aromatic
	Daphnia	Chronic EL50 0.89 mg/l Fresh water	21 days	Reproduction	Based on Kerosene (petroleum), hydrodesulfurized
	Daphnia	Chronic EL50 0.81 mg/l Fresh water	21 days	Immobilization	Based on Kerosene (petroleum), hydrodesulfurized
	Daphnia	Chronic LOEL 1.2 mg/l Fresh water	21 days	Reproduction	Based on Kerosene (petroleum), hydrodesulfurized
	Daphnia	Chronic LOEL 0.48 mg/l Fresh water	21 days	Adult Length	Based on Kerosene (petroleum), hydrodesulfurized
	Daphnia	Chronic NOEL 0.48 mg/l Fresh water	21 days	Reproduction	Based on Kerosene (petroleum), hydrodesulfurized
	Daphnia	Chronic NOEL 1.2 mg/l Fresh water	21 days	Adult Length	Based on Kerosene (petroleum), hydrodesulfurized
	Fish	Chronic NOEL 0.098 mg/l Nominal Fresh water	28 days	Mortality	Based on Kerosene
Fuels, diesel, No 2	Micro-organism	EL50 >1000 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Micro-organism	NOELR 3.217 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Algae	Acute EL50 22 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute EL50 210 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Daphnia	Acute EL50 68 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel

Section 12. Ecological information

	Algae	Acute ErL50 78 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Fish	Acute LL50 65 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Fish	Acute LL50 21 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Algae	Acute NOELR 10 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Algae	Acute NOELR 1 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute NOELR 46 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Fish	Chronic NOEL 0.083 mg/l Nominal Fresh water	14 days	Mortality	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Daphnia	Chronic NOELR 0.2 mg/l Nominal Fresh water	21 days	Immobilization	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
naphthalene	Algae	EC50 0.4 mg/l	96 hours	-	-
	Crustaceans	EC50 2.16 mg/l	48 hours	-	-

Conclusion/Summary ☑ Toxic to aquatic life with long lasting effects.

Persistence and degradability

☑ Expected to be biodegradable.

Conclusion/Summary Non-persistent per IMO criteria

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil/water partition coefficient (K_{oc})

Not available.

Mobility

☑ Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Other ecological information




Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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 local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	NA1993	UN1202	UN1202	UN1202
UN proper shipping name	Diesel fuel	Gas oil	Gas oil. Marine pollutant	Gas oil
Transport hazard class(es)	Combustible liquid.	3 	3 	3 
Packing group	III	III	III	III
Environmental hazards	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	<p>Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity. Reportable quantity 100 lbs / 45.4 kg [14.494 gal / 54.864 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p>	<p>Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.</p>	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E</p>	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p>

Special precautions for user Not available.

Section 14. Transport information

Transport in bulk according to Annex II of MARPOL and the IBC Code

Proper shipping name

MARPOL Annex 1 rules apply for bulk shipments by sea.
Category: gas oils, including ship's bunkers

Section 15. Regulatory information

Other regulations

Australia inventory (AICS)	At least one component is not listed.
Canada inventory	<input checked="" type="checkbox"/> All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	<input checked="" type="checkbox"/> At least one component is not listed.
Korea inventory (KECI)	Not determined.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	Not determined.
United States inventory (TSCA 8b)	All components are listed or exempted.
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

History

Date of issue/Date of revision 30/05/2018

Date of previous issue 13/03/2015.

Version 2

Prepared by Product Stewardship

Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS Number = Chemical Abstracts Service Registry Number
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
UN = United Nations
Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

References

Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Section 16. Other information

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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