1. Chemical product and company identification

Product name: ULTRA LOW SULFUR DIESEL (ULSD) FUEL
Whiting Refinery & Toledo Refinery

MSDS #: 0000003588
Historic MSDS #: None.
Code: 0000003588
Product use: Fuel.
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 SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)
OTHER PRODUCT INFORMATION: 1 (866) 4 BP - MSDS
(866-427-6737 Toll Free - North America)
email: bpcares@bp.com

2. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS #</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates</td>
<td>8008-20-6</td>
<td>100</td>
</tr>
</tbody>
</table>

3. Hazards identification

Physical state: Liquid.
Color: Amber. to Various colors.

Emergency overview: WARNING!

COMBUSTIBLE LIQUID AND VAPOR.
VAPOUR MAY CAUSE FLASH FIRE.
HARMFUL IF SWALLOWED.
ASPIRATION HAZARD.
HARMFUL OR FATAL IF LIQUID IS ASPIRATED INTO LUNGS.
CAUSES SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS, AND NAUSEA, AND MAY LEAD TO UNCONSCIOUSNESS.

Do not ingest. If ingested do not induce vomiting. Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Keep away from heat, sparks and flame. Keep container closed. Use with adequate ventilation. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential health effects:

- **Eyes**: Slightly irritating to the eyes.
- **Skin**: Causes skin irritation.
4. First aid measures

Eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion
If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed - can enter lungs and cause damage. Get medical attention immediately.

5. Fire-fighting measures

Flammability of the product
Combustible liquid.

Flash point
51.667 °C (Closed cup) Tagliabue.

Explosion limits
Lower: 0.6 %
Upper: 7.5 %

Products of combustion
These products are carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide).

Unusual fire/explosion hazards
Combustible liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Fire-fighting media and instructions
In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Withdraw from fire and let it burn. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

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

Special remarks on fire hazards
Do not use water jet.

6. Accidental release measures

Personal precautions
Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures"). Do not touch or walk through spilled material.
Environmental precautions and clean-up methods

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.

Personal protection in case of a large spill


CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling

Aspiration hazard if swallowed- can enter lungs and cause damage. Never siphon by mouth. Do not ingest. If ingested do not induce vomiting. When using do not eat, drink or smoke. Avoid contact with skin and clothing. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Use only with adequate ventilation. Avoid breathing vapor or mist. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Storage

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store and use only in equipment/containers designed for use with this product.

8. Exposure controls/personal protection

Occupational exposure limits

Employee name

Occupational exposure limits

ACGIH TLV (United States, 1/2006). Skin
TWA: 200 mg/m³ 8 hour(s).

Control Measures

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

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.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shields.

Skin and body

Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter.

CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Color</td>
<td>Amber. to Various colors.</td>
</tr>
<tr>
<td>Heat of combustion</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point / Range</td>
<td>171.11 to 357.22 °C</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>&lt;1 (Water = 1)</td>
</tr>
<tr>
<td>Solubility</td>
<td>negligible &lt;0.1%</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Kinematic: 1.8 to 3.6 mm²/s (1.8 to 3.6 cSt) at 37.778°C</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability and reactivity</td>
<td>Stable under recommended storage and handling conditions (See Section: &quot;Handling and storage&quot;).</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis, halogenated compounds.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>These products are carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)</td>
</tr>
<tr>
<td>Hazardous polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

11. Toxicological information

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>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.</td>
</tr>
<tr>
<td>Chronic toxicity</td>
<td>No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).</td>
</tr>
<tr>
<td>Carcinogenic effects</td>
<td>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.</td>
</tr>
</tbody>
</table>
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.

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.

### 12. Ecological information

**Ecotoxicity**
Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**Mobility**
Spillages may penetrate the soil causing ground water contamination.

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

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

### 13. Disposal considerations

**Waste information**
Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

Consult your local or regional authorities.

### 14. Transport information

**International transport regulations**

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>Packing group</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>NA1993</td>
<td>Diesel Fuel</td>
<td>Combustible liquid.</td>
<td>III</td>
<td>—</td>
<td>Reportable quantity 100 lbs. (45.36 kg)</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>UN1202</td>
<td>Gas oil</td>
<td>3</td>
<td>III</td>
<td></td>
<td>Not determined.</td>
</tr>
<tr>
<td>IMDG Classification</td>
<td>UN1202</td>
<td>Gas oil</td>
<td>3</td>
<td>III</td>
<td></td>
<td>Not determined.</td>
</tr>
<tr>
<td>IATA Classification</td>
<td>UN1202</td>
<td>Gas oil</td>
<td>3</td>
<td>III</td>
<td></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>
15. Regulatory information

U.S. Federal regulations
US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: ULTRA LOW SULFUR DIESEL (ULSD) FUEL: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SARA 313 
Form R - Reporting requirements 
Supplier notification 
This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4): This material is not regulated under CERCLA Sections 103 and 107.

State regulations
Massachusetts RTK: Straight run kerosine
New Jersey: Straight run kerosine
Pennsylvania RTK: Straight run kerosine (generic environmental hazard)
California Prop 65: No products were found

Prop 65 chemicals will result under certain conditions from the use of this material. For example, burning fuels produces combustion products including diesel exhaust, a Prop 65 carcinogen, and carbon monoxide, a Prop 65 reproductive toxin.

Inventories
AUSTRALIAN INVENTORY (AICS): Not determined.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): Not determined.

EC INVENTORY (EINECS:ELINCS): Not determined.

JAPAN INVENTORY (ENCS): Not determined.

KOREA INVENTORY (ECL): Not determined.

PHILIPPINE INVENTORY (PICCS): Not determined.

16. Other information

Label requirements
WARNING!

COMBUSTIBLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FLASH FIRE.
HARMFUL IF SWALLOWED.
ASPIRATION HAZARD.
HARMFUL OR FATAL IF LIQUID IS ASPIRATED INTO LUNGS.
CAUSES SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS, AND NAUSEA, AND MAY LEAD TO UNCONSCIOUSNESS.

HMIS® Rating :

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 *</td>
<td>2</td>
<td>0</td>
<td>x</td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

Fire hazard 
Instability 
Specific hazard

History
Date of Issue 07/05/2006.
Notice to reader

NOTICE: This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.