# **SAFETY DATA SHEET**



#### Diesel, Diesel Oil

### **Section 1. Identification**

**GHS** product identifier

: Diesel, Diesel Oil

**Chemical name** 

: Mixture (C11 to C20 Hydrocarbon)

Other means of identification

: No. 2 Diesel Fuel, Diesel Fuel Oil, Diesel (Ultra Low, Low Sulfur), Diesel, Northern Polar

- Premium Diesel (Including Biodiesel)

**Product type** 

: Liquid.

**Identified uses** 

Fuel.

**Supplier's details** 

: Murphy Oil USA, Inc. 200 Peach Street El Dorado, AR 71730 Tel: +1-870-875-7600 Fax: 866-933-1563

Website: http://www.murphyusa.com

Emergency telephone number (with hours of operation) : CHEMTREC, U.S.: 1-800-424-9300 International: +1-703-527-3887 # CCN15145

24 hours/day, 7 days/week

### Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 4
CARCINOGENICITY - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC HAZARD (ACUTE) - Category 3
AQUATIC HAZARD (LONG-TERM) - Category 3

**GHS label elements** 

Hazard pictograms



Signal word

: Danger

**Hazard statements** 

: Combustible liquid.

Suspected of causing cancer.

May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention** 

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from flames and hot surfaces. - No smoking. Avoid release to the environment.



### Section 2. Hazards identification

Response

: IF exposed or concerned: Get medical attention. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** 

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

Diesel exhaust may cause lung cancer.

### Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Chemical name

: Mixture (C11 to C20 Hydrocarbon)

Other means of identification

: No. 2 Diesel Fuel, Diesel Fuel Oil, Diesel (Ultra Low, Low Sulfur), Diesel, Northern Polar

- Premium Diesel (Including Biodiesel)

#### **CAS** number/other identifiers

**CAS** number

: Not applicable.

**Product code** 

: 522, 523, 524, 525, 526, 527, 530, 532, 533, 534, 535, 536, 537, 538, 539, 540, 619, 620, 630, 631, 633, 635, 637, 638, 646, 648, 650, 651, 652, 653, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747

Ingredient name CAS number Fuels, diesel 90 - 100 68334-30-5 Soybean oil 0 - 10 8001-22-7 Naphthalene 91-20-3 <1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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 or the environment 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** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Skin contact

Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.



### Section 4. First aid measures

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact**: Moderately irritating to eyes.

**Inhalation** : Moderately irritating to the respiratory system.

**Skin contact** : Can cause dermatitis.

**Ingestion** : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following:

Irritation redness

**Ingestion**: Adverse symptoms may include the following:

nausea or vomiting

Medical conditions aggravated by overexposure

: None known.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

#### **Extinguishing media**

media

Suitable extinguishing media

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** 

: Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical

: Combustible liquid. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being

discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

Special protective actions for fire-fighters

: 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 appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.





### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. 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). Water polluting material. May be harmful to the environment if released in large quantities.

#### Methods and materials for containment and cleaning up

**Spill** 

: Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 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 swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. 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. 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. Workers should wash hands and face before eating, drinking and smoking. 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. 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 avoid environmental contamination.





### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

| Ingredient name | Exposure limits   |
|-----------------|---|
| Fuels, diesel   | ACGIH TLV (United States, 6/2013). Absorbed through skin. |
|                 | TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hours. |
|                 | Form: Inhalable fraction and vapor                        |
| Naphthalene     | ACGIH TLV (United States, 6/2013). Absorbed through skin. |
|                 | STEL: 79 mg/m³ 15 minutes.                                |
|                 | STEL: 15 ppm 15 minutes.                                  |
|                 | TWA: 52 mg/m³ 8 hours.                                    |
|                 | TWA: 10 ppm 8 hours.                                      |
|                 | NIOSH REL (United States, 4/2013).                        |
|                 | STEL: 75 mg/m³ 15 minutes.                                |
|                 | STEL: 15 ppm 15 minutes.                                  |
|                 | TWA: 50 mg/m³ 10 hours.                                   |
|                 | TWA: 10 ppm 10 hours.                                     |
|                 | OSHA PEL (United States, 2/2013).                         |
|                 | TWA: 50 mg/m <sup>3</sup> 8 hours.                        |
|                 | TWA: 10 ppm 8 hours.                                      |

# Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### **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

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

# Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### **Body protection**

: 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.

#### 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 a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



## Section 9. Physical and chemical properties

**Appearance** 

**Physical state** : Liquid. [Clear.]

Color : Clear to amber, clear to yellow, if dyed, Red.

Odor : Petroleum Hydrocarbon.

: Not available. **Odor threshold** pН : Not applicable. : Not available. **Melting point** 

**Boiling point** 100 to 357.22°C (212 to 675°F)

: Closed cup: >55°C (>131°F) [Pensky-Martens.] Flash point

**Evaporation rate** : Not available. : Not available. Flammability (solid, gas) : Lower: 0.6% Lower and upper explosive (flammable) limits Upper: 7%

: 0.13 kPa (1 mm Hg) [room temperature] Vapor pressure

Vapor density : Not available. **Relative density** : 0.81 to 0.87

Solubility : Very slightly soluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available.

**Viscosity** : Kinematic (40°C (104°F)): <0.04 cm<sup>2</sup>/s (<4 cSt)

### Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials, chlorine,

peroxides, nitric acid, sulfuric acid.

**Hazardous decomposition** 

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.





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## **Section 11. Toxicological information**

#### **Information on toxicological effects**

#### **Acute toxicity**

| Product/ingredient name      | Result                                | Species | Dose                                | Exposure |
|------------------------------|---------------------------------------|---------|-------------------------------------|----------|
| Fuels, diesel<br>Naphthalene | LD50 Oral<br>LD50 Dermal<br>LD50 Oral | Rabbit  | 7500 mg/kg<br>>20 g/kg<br>490 mg/kg | -        |

#### **Irritation/Corrosion**

| Product/ingredient name | Result                 | Species | Score | Exposure         | Observation |
|-------------------------|------------------------|---------|-------|------------------|-------------|
| Fuels, diesel           | Skin - Severe irritant | Rabbit  | -     | 24 hours 500 μL  | -           |
|                         | Skin - Severe irritant | Rabbit  | -     | 240 hours 80 g   | -           |
| Naphthalene             | Skin - Mild irritant   | Rabbit  | -     | 495 mg           | -           |
|                         | Skin - Severe irritant | Rabbit  | -     | 24 hours 0.05 mL | -           |

#### **Sensitization**

There is no data available.

#### Carcinogenicity

#### **Classification**

| Product/ingredient name | OSHA | IARC | NTP      | ACGIH | EPA | NIOSH |
|-------------------------|------|------|----------|-------|-----|-------|
| Fuels, diesel           | -    | 3    | <u>-</u> | A3    | -   | -     |
| Naphthalene             | -    | 2B   | Possible | A4    | -   | None. |

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### **Aspiration hazard**

There is no data available.

Information on the likely

routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** : Moderately irritating to eyes.

**Inhalation** : Moderately irritating to the respiratory system.

Skin contact : Can cause dermatitis.

Ingestion : May be fatal if swallowed and enters airways.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No known significant effects or critical hazards.

**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



# **Section 11. Toxicological information**

**Short term exposure** 

Potential immediate

: No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

**Long term exposure** 

Potential immediate

effects

: No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : Diesel exhaust may cause lung cancer.

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**

There is no data available.

## **Section 12. Ecological information**

#### **Toxicity**

| Product/ingredient name | Result   | Species                          | Exposure                                    |
|-------------------------|--|----------------------------------|---|
|                         | Acute LC50 2350 μg/l Marine water<br>Acute LC50 213 μg/l Fresh water | Crustaceans - Palaemonetes pugio | 48 hours<br>48 hours<br>96 hours<br>40 days |

#### Persistence and degradability

There is no data available.

#### **Bioaccumulative potential**

| Product/ingredient name | LogPow | BCF         | Potential |
|-------------------------|--------|-------------|-----------|
| Naphthalene             | 3.4    | 36.5 to 168 | low       |

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: There is no data available.





### **Section 12. Ecological information**

#### Other adverse effects

: If released to soil, petroleum distillates are expected to biodegrade under both aerobic and anaerobic conditions. Some components of petroleum distillates may adsorb very strongly to soil. These materials may rapidly volatilize from both moist and dry soil although its expected strong adsorption may significantly attenuate the rate of this process. If released to water, petroleum distillates are expected to biodegrade under both aerobic and anaerobic conditions. Some components of these materials may significantly bioconcentrate in fish and aquatic organisms and strongly adsorb to sediment and suspended organic matter. The estimated half-life for volatilization of petroleum distillates from a model river is 3-6 hrs while that from a model lake is >130 days.

### Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

### **Section 14. Transport information**

|                            | DOT Classification   | IMDG        | IATA        |
|----------------------------|--|-------------|-------------|
| UN number                  | UN1202   | UN1202      | UN1202      |
| UN proper shipping name    | DIESEL FUEL  | DIESEL FUEL | DIESEL FUEL |
| Transport hazard class(es) | 3  | 3           | 3           |
| Packing group              | III  | III         | III         |
| Environmental hazards      | No.  | No.         | No.         |
| Additional information     | This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. 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 11111.1 lbs / 5044.4 kg [1586.4 gal / 6005.3 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | -           | -           |

**AERG** : 128

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.



### **Section 14. Transport information**

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

# Section 15. Regulatory information

**U.S. Federal regulations** 

: TSCA 8(a) PAIR: Naphthalene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Naphthalene Clean Water Act (CWA) 311: Naphthalene

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**  : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

**Class II Substances** 

: Not listed

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

**DEA List II Chemicals** 

: Not listed

(Essential Chemicals)

**SARA 302/304** 

**Composition/information on ingredients** 

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : Fire hazard

> Immediate (acute) health hazard Delayed (chronic) health hazard

### Composition/information on ingredients

| Name          | hazard   | Sudden<br>release of<br>pressure |     | Immediate<br>(acute)<br>health<br>hazard | Delayed<br>(chronic)<br>health<br>hazard |
|---------------|----------|----------------------------------|-----|--|--|
| Fuels, diesel | <br>Yes. | No.                              | No. | Yes.                                     | No.                                      |
| Naphthalene   | Yes.     | No.                              | No. | Yes.                                     | Yes.                                     |

#### **SARA 313**

|                                 | Product name | CAS number | %  |
|---------------------------------|--------------|------------|----|
| Form R - Reporting requirements | Naphthalene  | 91-20-3    | <1 |
| Supplier notification           | Naphthalene  | 91-20-3    | <1 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

#### **State regulations**

**Massachusetts** : None of the components are listed.





# Section 15. Regulatory information

**New York** : The following components are listed: Naphthalene **New Jersey** : The following components are listed: Naphthalene **Pennsylvania** : The following components are listed: Naphthalene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

| Ingredient name | Cancer | •   | level | Maximum acceptable dosage level |
|-----------------|--------|-----|-------|---------------------------------|
| Naphthalene     | Yes.   | No. | Yes.  | No.                             |

### Section 16. Other information

#### **History**

Date of issue mm/dd/yyyy : 07/15/2014 Date of previous issue : 08/15/2011

: 3 Version

Revised Section(s) : Not applicable.

: KMK Regulatory Services Inc. Prepared by **Key to abbreviations** : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

