

# BHARAT CHEMICAL

MATERIAL SAFETY DATA SHEET

HSD/MGO

## 1. Chemical and Company Identification

|                              |                             |
|------------------------------|-----------------------------|
| Trade Name                   | N/A                         |
| Product Code                 | N/A                         |
| Supplier                     | BHARAT CHEMICAL             |
| Routine Enquiries            |                             |
| Fax                          |                             |
| Emergency Contact (24 Hours) | 02836-237776                |
| Chemical Description         | Petroleum Middle Distillate |

## 2. Composition and Ingredients

| Name                          | Components  | Range in % |
|-------------------------------|---|------------|
| Marine Gas Oil or Diesel Fuel | <b>A complex mixture of hydrocarbons produced by crude distillation predominantly c-9 to c-20 and boiling range 160 – 400 °C. Hydrotreated or desulfurized product also contains distillate from catalytic cracking. The latter contains bicyclic and tricyclic aromatic hydrocarbons</b> | 100        |

## 3. Hazards Identification

|                                |   |
|--------------------------------|---|
| <b>Warning Statements</b>      | FLAMMABLE. COMBUSTIBLE, MAY CAUSE SEVERE EYE AND SKIN IRRITATION. MAY CAUSE RESPIRATORY IRRITATION. CONTAINS MIDDLE DISTILLATE WHICH MAY BE HARMFUL. LOW VISCOSITY PETROLEUM MIXTURE WHICH CAN CAUSE LUNG INJURY AVOID PROLONGED AND REPEATED CONTACT WITH SKIN. IF SKIN CONTACT OCCURS, WASH EXPOSED AREA WITH SOAP AND WATER. LAUNDRER CONTAMINATED CLOTHING. USE ONLY AS A FUEL.                       |
| <b>Eyes</b>                    | May cause slight eye irritation   |
| <b>Oral</b>                    | Expected to be have slight acute toxicity by ingestion. Ingestion of this product and subsequent vomiting can result in aspiration into the lungs, causing chemical pneumonia and lung damage   |
| <b>Inhalation</b>              | May cause symptoms of drowsiness or narcosis from inhalation of high vapour concentrations. See Long term Toxic Effects and Section 11 for additional information.  |
| <b>Skin</b>                    | May cause severe irritation with pain, redness, swelling, chemical burns and blister formation. Other than irritation effects noted above, adverse effects are not expected from brief skin contact. Prolonged contact may cause more severe irritation and discomfort, seen as local redness and swelling. Prolonged or repeated skin contact may be harmful. See Section 11 for additional information. |
| <b>Long Term Toxic Effects</b> | Cancer information available on this material or a component(s). See section 11 for additional information.   |

## 4. First Aid Measures

|             |   |
|-------------|---|
| <b>Eyes</b> | Flush eyes immediately with fresh water for several minutes while |
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|                         | holding the eyelids open. If irritation persists, see a doctor   |
| <b>Skin</b>             | Remove and launder contaminated clothing, including shoes. Wash skin thoroughly with soap and water. See a doctor if any signs or symptoms described in this MSDS occur. Discard contaminated non-waterproof shoes and boots   |
| <b>Ingestion</b>        | Do not induce vomiting. Aspiration of the material can cause serious lung injury such as chemical pneumonia. Call a doctor immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.. |
| <b>Inhalation</b>       | If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor   |
| <b>Advice to Doctor</b> | This product may present an aspiration hazard. See related comments in this MSDS. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours                                   |

## 5. Fire Fighting Measures

|                                       |  |
|---------------------------------------|--|
| <b>Ignition Temperature, °C</b>       | 350  |
| <b>Flammable Limits (% by Volume)</b> | Not determined   |
| <b>Flash Point, °C</b>                | 60-70 deg C  |
| <b>Fire Extinguishing Agents</b>      | According to the US National Fire Protection Association Guide, use water spray, dry chemical, foam or carbondioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak |
| <b>Explosion Hazards</b>              | Full body flame-resistant clothing and/or turn-out gear recommended for persons attempting leak or spill control and for fire-fighting.  |

## 6. Accidental Release Measures

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|-------------------------|---|
| <b>In case of Spill</b> | Eliminate all ignition sources including internal combustion engines and power tools. Ventilate area. Keep people away. Stay upwind and warn of possible downwind explosion hazard. Avoid breathing vapours and eye or skin contact. Use respirator and protective clothing as discussed in this MSDS (See section 8). Use supplied-air respirator for large releases in confined area. Contain spill if possible. Remove with inert absorbent and place in container for disposal at an approved facility. Prvent entry into sewers and waterways. |
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## 7. Handling and Storage

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| Keep away from heat, sparks and flame. Handle and store in well-ventilated area and in accordance with local regulations regarding flammable liquids. Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION: THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed off in an environmentally safe manner and in accordance with governmental regulations. |
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## 8. Exposure Control/Personal Protection

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| <b>Eyes</b> | Avoid eye contact. The wearing of chemical safety goggles or face shield is recommended. |
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| <b>Skin</b>            | Avoid contact with skin or street clothing. Skin contact can be minimized by wearing protective clothing including coveralls, gloves and boots. Gloves and boots should be resistant to chemicals and petroleum distillates. Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.. |
| <b>Inhalation</b>      | If operating conditions create airborne concentrations which exceed the recommended exposure standard(s), the use of an approved respirator is recommended. Wear approved respiratory protection such as organic vapour cartridge respirator with particulate prefilter. Use approved supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.                                    |
| <b>Ventilation</b>     | Under normal applications of this product, general dilution ventilation is adequate   |
| <b>Exposure Limits</b> | No ACGIH TLV exists for this product, bharat recommends an daily 8 hour TWA of 100 ppm  |

## 9. Physical and Chemical Properties

Note: The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

|                                       |                                      |
|---------------------------------------|--------------------------------------|
| <b>Appearance and Odor</b>            | Light amber liquid                   |
| <b>Boiling Point</b>                  | 200                                  |
| <b>Vapor Pr (mmHG @ 25 °C)</b>        | Low                                  |
| <b>Density( kg/l at 15 °C)</b>        | 0.82 – 0.86                          |
| <b>Vapor Density (Air=1)</b>          | Not determined                       |
| <b>Undiluted product's pH</b>         | Not applicable                       |
| <b>Solubility in Water</b>            | Negligible                           |
| <b>Percent Volatile by Volume</b>     | Not determined                       |
| <b>Evaporation</b>                    | Not determined                       |
| <b>Viscosity (All Product Grades)</b> | 2 to 6 mm <sup>2</sup> /sec at 50 °C |

## 10. Stability and Reactivity

|                                  |  |
|----------------------------------|--|
| <b>Hazardous Polymerizations</b> | DO NOT OCCUR   |
| <b>Products of Combustion</b>    | Carbon monoxide and carbon di oxide may be formed during burning in limited air supply |
| <b>Conditions to Avoid</b>       | Heat, Strong oxidizers   |

## 11. Toxicological Information

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|----------------|--|
| <b>General</b> | Middle distillates have caused skin cancer in laboratory animals following lifetime application to the skin. Brief or intermittent skin contact is not expected to cause adverse effects if it is washed thoroughly. Avoid prolonged or repeated skin contact or breathing of vapour or mist. UN NIOSH has recommended whole diesel exhaust be regarded as a potential occupational carcinogen, based on findings of carcinogenic response in laboratory animals exposed to whole diesel exhaust. The excess risk has not been estimated. Avoid exposure to diesel exhaust. Note: Exhaust from fuel oils and gas oils may present similar exposure potential and should also be avoided. |
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## 12. Ecological Information

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|------------------------------|---|
| <b>Environmental Effects</b> | No specific toxicology data on this product is available. |
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## 13. Disposal Considerations

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| <b>Waste Disposal</b> | Place contaminated materials in disposable containers and dispose off in a manner consistent with applicable regulations. Contact local environmental/health authorities for approved disposal |
| <b>Remarks</b>        | Do not allow to enter drains or sewers. Can cause explosion  |

## 14. Transport Information

|                               |   |
|-------------------------------|---|
| <b>UN Number</b>              | 1202  |
| <b>Dangerous Goods Class</b>  | 3   |
| <b>Proper Shipping Name</b>   | Gas Oil or Diesel Fuel or Heating Oil Light                                 |
| <b>Additional Information</b> | Transport in accordance with local regulations regarding flammable liquids. |

## 15. Regulatory Information

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|-------------------------------|---|
| <b>Respirator Information</b> | In the absence of local approval authorities/standards, follow US NIOSH/MSHA, UK BSI regulations. Respirators must meet either the above or local standard for approved respirators |
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## 16. Other Information — No specific notes on this product.

*To the best of our knowledge, the information provided in this MSDS document is correct. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however, these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution.*

*Customers are encouraged to review this information, follow precautions and comply with all applicable laws and regulations regarding the use and disposal of this product. The final determination of the suitability of any material is the sole responsibility of the user.*