



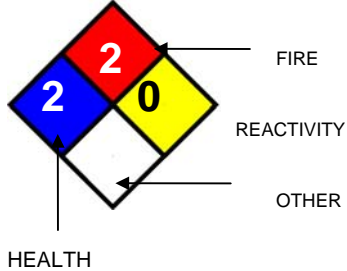
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An Axel Johnson, Inc. Company

**MATERIAL SAFETY DATA SHEET**

**#6 FUEL OIL**

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| SECTION 1 - MATERIAL IDENTIFICATION |   | 24 HOUR EMERGENCY INFORMATION                                 |   |
|-------------------------------------|---|---|---|
| <b>PRODUCT / CHEMICAL NAME</b>      | <b>#6 FUEL OIL</b>                                    | Sprague: 603-431-1000<br>Chemtrec: 800-424-9300               |   |
| <b>PRODUCT / CHEMICAL SYNONYMS</b>  | BUNKER C FUEL, UTILITY FUEL OIL, RESIDUAL FUEL OIL #6 | <b>HMS / NFPA HAZARD RATING</b>                               |  |
| <b>CHEMICAL FAMILY / FORMULA</b>    | AROMATIC PETROLEUM OIL                                | 4=EXTREME<br>3=SERIOUS<br>2=MODERATE<br>1=SLIGHT<br>0=MINIMAL |   |
| <b>MATERIAL USE OR OCCURRENCE</b>   | INDUSTRIAL FUEL OIL                                   |   |   |

| SECTION 2 - INGREDIENTS   |             |            |   |           |                     |       |
|---|-------------|------------|---|-----------|---------------------|-------|
| COMPONENT   | %           | C.A.S. NO. | OSHA PEL                                  | OSHA STEL | ACGIH TLV           | OTHER |
| NO. 6 FUEL OIL<br>Consisting of a complex mixture of parafinic, olefinic, and naphthenic hydrocarbons, plus fused polycyclic hydrocarbons (C10 and higher) as benzene solubles. | 100         | 68-553-004 | 5 mg/M <sup>3</sup><br>(Mineral oil mist) |           | 5 mg/M <sup>3</sup> |       |
| HYDROGEN SULFIDE  | VARIES (<1) | 77-830-64  | 20 PPM                                    |           |                     |       |

| SECTION 3 - PHYSICAL DATA   |  |
|---|--|
| <b>BOILING POINT:</b> 400°-1200°F (204°-649°C)                        | <b>% VOLATILITY BY VOLUME:</b> N/A     |
| <b>VAPOR PRESSURE (mm Hg):</b> 0.2                                    | <b>VAPOR DENSITY (AIR = 1):</b> 6      |
| <b>SPECIFIC GRAVITY (H2O = 1):</b> .9402 – 1.00                       | <b>SOLUBILITY IN WATER:</b> Insoluble. |
| <b>EVAPORATION RATE (n-butyl acetate = 1):</b> None determined.       |  |
| <b>APPEARANCE &amp; ODOR:</b> Thick heavy black liquid, asphalt odor. |  |

| SECTION 4 - FIRE AND EXPLOSION HAZARD DATA  |                                  |
|---|----------------------------------|
| <b>FLASH POINT:</b> 150°-270° F (66°-132° C) (Tag. Closed Cup)  | <b>AUTOIGNITION TEMP:</b> 765° F |
| <b>FLAMMABILITY LIMITS IN AIR (% BY VOL.)</b>   | <b>LEL:</b> 3.9 <b>UEL:</b> 20.1 |
| <b>EXTINGUISHING MEDIUM:</b> Dry chemical, foam, and carbon dioxide.  |                                  |
| <b>SPECIAL FIRE FIGHTING PROCEDURES:</b> Do not use water on a 6 oil fire in a tank or other containers since it may cause violent eruption and spreading of burning 6 oil. Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves, and rubber boots); including a positive-pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water. Judgement must be used when applying foams to burning oil that is above the boiling point of water. Consult NFPA 11 for additional information. |                                  |
| <b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> Water or foam may cause frothing.  |                                  |



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**SECTION 5 - HEALTH DATA**

|                                 |   |  |
|---------------------------------|---|--|
| <b>TOXICOLOGICAL TEST DATA:</b> | Oral rat; LD50  | <b>RESULTS:</b><br>5300 mg/kg (NIOSH RTECS July 1993)  |
| <b>ACUTE HEALTH EFFECTS</b>     |   | <b>CHRONIC HEALTH EFFECTS</b>  |
| <b>INHALATION</b>               | Irritation of respiratory tract mucous membranes, nausea, CNS depression, pulmonary edema.                      | Irritation of respiratory tract mucous membranes, possible mild chemical pneumonitis with high concentrations. |
| <b>INGESTION</b>                | Irritation of gastrointestinal tract. Larger quantities can cause nausea and central nervous system depression. | No known effects.  |
| <b>SKIN CONTACT</b>             | May cause skin irritation.  | Repeated or prolonged skin contact can result in skin disorders and potential sensitization.                   |
| <b>EYE CONTACT</b>              | Irritation of cornea and/or conjunctiva.  | No known effects.  |

**FIRST AID**



**PROCEDURES**

**INHALATION:** Remove from vapor to fresh air. If breathing has stopped give artificial respiration. Maintain airway and blood pressure and administer oxygen if available. Keep affected person warm and at rest. Qualified personnel should perform administration of oxygen. Get medical attention immediately.

**INGESTION:** **DO NOT INDUCE VOMITING or give anything by mouth to an unconscious person.** Get medical attention immediately.

**SKIN CONTACT:** **Promptly** remove contaminated clothing. Wash skin with soap and water. If irritation develops, seek medical aid.

**EYE CONTACT:** **Flush** eyes immediately with large amounts of water, occasionally lifting upper and lower lids until no evidence of chemical remains (approximately 15-20 minutes). If irritation develops, seek medical aid.

**SECTION 6 - REACTIVITY DATA**

|                                  |   |
|----------------------------------|---|
| <b>STABILITY:</b>                | Stable under normal temperatures and pressures.   |
| <b>HAZARDOUS POLYMERIZATION:</b> | Hazardous polymerization has not been known to occur under normal temperatures and pressures.   |
| <b>CONDITIONS TO AVOID:</b>      | All sources of ignition (smoking, heat, flames, sparks).  |
| <b>INCOMPATIBLES:</b>            | Strong oxidants, e.g., chlorine and concentrated oxygen.<br>Carbon monoxide and other unidentified organic compounds may be formed upon combustion. |

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**SECTION 7 - SPECIAL PROTECTION**

|  |   |  |
|--|---|--|
| <b>RESPIRATORY PROTECTION:</b>                 | Use with adequate ventilation. For large spills or when completing work in confined spaces, use a mask with an organic vapor cartridge or positive pressure air supplied (SCBA) unit. |  |
| <b>VENTILATION</b>                             | <b>LOCAL EXHAUST:<br/>MECHANICAL<br/>(General):</b>   | Outdoors, work upwind.<br>Recommended for use in enclosed or semi-enclosed work areas. |
| <b>EYE PROTECTION:</b>                         | Splash goggles or shields with safety glasses   |  |
| <b>PROTECTIVE GLOVES:</b>                      | Recommended to minimize contact. Neoprene, PVC.   |  |
| <b>OTHER PROTECTIVE CLOTHING OR EQUIPMENT:</b> | Employee must wear appropriate impervious clothing and equipment to prevent repeated or prolonged skin contact with this substance.   |  |

**SECTION 8 - SPECIAL PRECAUTIONS**

|   |   |
|---|---|
| <b>PRECAUTIONS FOR SAFE HANDLING AND STORAGE:</b> | Avoid excessive inhalation or skin contact. Isolate from sources of ignition. Prohibit eating, drinking, and the use of tobacco in the immediate area of asphalt use or where asphalt fumes are present. Avoid prolonged contact with exposed skin and sunlight – photosensitization reactions may occur.   |
| <b>SPILL AND LEAK PROCEDURES:</b>                 | Shut off ignition sources (no smoking, shut off flames or flares in hazard area). Isolate hazard area and restrict entry. If properly trained, proceed with the following measures:<br>1. For small spills, take up with sand or other absorbent material and place into containers for later disposal; and,<br>2. For large spills, dike far ahead of spill to prevent entrance into watercourses and/or ground water. Observe local, state, and federal governmental regulations. |
| <b>WASTE DISPOSAL METHOD</b>                      | Recycle or dispose of in accordance with local, state, and federal safety and environmental laws and regulations.   |

**SECTION 9 - DOT HAZARDOUS MATERIAL INFORMATION**

|   |  |  |
|---|--|--|
| <b>PROPER SHIPPING NAME:</b> FUEL OIL (#6)  | <b>LABEL:</b><br>FLAMMABLE                                     | <b>REQUIRED PLACARDING:</b><br>FLAMMABLE OR COMBUSTIBLE / 1993 |
| <b>HAZARD CLASS:</b><br>CLASS 3 (Flammable liquid)  | <b>PACKING GROUP<br/>(P.G.):</b> III                           | <b>N.A./U.N. NUMBER:</b> NA 1993                               |
| <b>HAZARDOUS SUBSTANCE / RQ:</b> NOT AVAILABLE  | <b>SHIPPING DESCRIPTION:</b> FUEL OIL (#6), 3, NA 1993, PG III |  |
| <b>NOTE:</b> This product may be re-classed as a combustible liquid when shipped domestically, by land only. If re-classed as a combustible liquid, this product is unregulated by DOT when shipped in non-bulk quantities. |  |  |

**SECTION 10 - EPA SARA TITLE III INFORMATION**

|                               |                   |                     |                     |
|-------------------------------|-------------------|---------------------|---------------------|
| <b>SECTION 311/312</b>        | <b>ACUTE:</b> YES | <b>CHRONIC:</b> YES |                     |
| <b>HAZARD CLASSIFICATION:</b> | <b>FIRE:</b> YES  | <b>PRESSURE:</b> NO | <b>REACTIVE:</b> NO |

**SECTION 11 - REMARKS**

None



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**SECTION 12 - ADDITIONAL REGULATORY DATA**

| <b>REPORTABLE COMPONENTS: FEDERAL EPA</b> | <b>%</b> | <b>SARA RQ</b> | <b>CERCLA RQ</b> | <b>RCRA NO.</b> |
|---|----------|----------------|------------------|-----------------|
| N/A                                       |          | ----           | ----             |                 |

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