KleenDEF Diesel Exhaust Fluid is a mixture of 32.5% high purity synthetic urea and 67.5% deionized water that is used in Selective Catalytic Reduction (SCR) systems on diesel engines. DEF is the primary ingredient used to help convert NOx to harmless nitrogen and water. It is stable, colorless, non-flammable, non-toxic and is classified as minimum risk for transportation. KleenDEF conforms to the ISO-22241-1 specification for DEF, is API registered and meets or exceeds OEM specifications.

**HANDLING AND STORAGE**

The shelf life of DEF is directly related to the temperature at which it is stored. Storage temperature between 12° and 86° F are recommended to maintain optimal shelf life of up to two years. If KleenDEF freezes, its efficacy will not be affected upon thawing. To maintain the purity of DEF and not harm the SCR Catalyst System care must be taken regarding the material of construction for all items that come in contact with the DEF solution. (See the ISO-22241-1 standards for the listing of recommended and not recommended materials for contact with DEF.)

**PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>&gt;212˚ F</td>
</tr>
<tr>
<td>Crystallization Point</td>
<td>12˚ F</td>
</tr>
<tr>
<td>Pounds/Gallons</td>
<td>9.09</td>
</tr>
<tr>
<td>Specific Gravity (Water=1)</td>
<td>1.09</td>
</tr>
<tr>
<td>Vapor Pressure (mm of Hg)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>0.6</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>100%</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless, clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>None to slight ammonia</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

**PACKAGING OPTIONS**

- **2.5 Gallon**
  - Part# KLF002
  - UPC Code: 0-74804-06106-2
  - 22.75 lbs.
  - 9.5”l x 9.5”w x 10”h
- **55 Gallon Drum**
  - Part# KLF001
  - UPC Code: 0-74804-05734-8
  - 522.5 lbs. (per drum)
  - 22.5” dia. x 35.5” high
  - 4 drums
- **275 Gallon Tote**
  - Part# KLF275
  - UPC Code: 0-74804-05733-1
  - 2,581 lbs. (per tote)
  - 48”l x 40”w x 46”h
  - 1 tote
- **330 Gallon Tote**
  - Part# KLF330
  - UPC Code: 0-74804-05732-4
  - 3,086 lbs. (per tote)
  - 48”l x 40”w x 53”h
  - 14 totes

*Also available in bulk.*