# **Technical Data Sheet**





# Foodmax HTF 32

# Premium food grade heat transfer fluid

# Description

Foodmax HTF 32 is made with food grade synergistic blends of severely hydro treated and hydro cracked hydrocarbon base fluids. It is formulated to be very thermally and oxidative stable and is further enhanced with proprietary additives that greatly extends the life time over normal and other synthetic food grade heat transfer fluids. It provides exceptional performance in a number of food related Heat Transfer applications. Foodmax HTF 32 is non-toxic and nonhazardous, it meets US FDA 21 CFR 178.3570 lubricants for incidental food contact and is NSF HT-1 approved. It is compatible with mineral and PAO oils.

#### Applications

Foodmax HTF 32 is used as a Heat Transfer medium in numerous food related applications, designed for systems operating at a maximum temperature of 305 °C. The maximum film temperature is 325 °C.

#### Benefits

- Excellent thermal & oxidation stability which contributes to long life at very high temperatures
- Very high flash, fire & auto-ignition temperatures for added safety
- Very low volatility and vapour pressures
- High heat capacity and thermal conductivity
- Very good deposit control to help keep system clean
- Low viscosity at operating temperatures for improved pumping efficiency
- Excellent demulsibility and cold flow properties for smoother start ups

# Typical performance data

|  | HTF 32 |
|--|--------|
| Density @ 20°C, g/ml                     | 0.84   |
| Viscosity @ 40°C, cSt                    | 41     |
| Flash point, °C                          | 240    |
| Pour point, °C                           | -10    |
| Carbon residue, %                        | 0.05   |
| Thermal conductivity @ 40 °C, (W/ m.K)   | 0.132  |
| Thermal conductivity @ 200 °C, (W/ m.K)  | 0.120  |
| Coefficient of thermal expansion, per °C | 0.0008 |
| NSF registration                         | 138898 |
| Kosher approval                          | Yes    |

All performance data on this Technical Data Sheet are indicative only and can vary during production **Matrix Specialty Lubricants BV - info@matrix-lubricants.com – www.matrix-lubricants.com** 

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# Liquid properties table:

| TEMPERATURE | DENSITY | KINEMATIC VISCOSITY | THERMAL CONDUCTIVITY | HEAT CAPACITY | VAPOR PRESSURE |
|-------------|---------|---------------------|----------------------|---------------|----------------|
| (celsius)   | (kg/m3) | (cSt)               | (W/m*K)              | (kj/kg*K)     | (kPa)          |
| 5           | 0,864   | 275,6               | 0,138                | 1,788         | 0,00           |
| 15          | 0,858   | 142,6               | 0,138                | 1,819         | 0,00           |
| 25          | 0,852   | 81,1                | 0,137                | 1,851         | 0,00           |
| 35          | 0,846   | 49,8                | 0,136                | 1,882         | 0,00           |
| 40          | 0,843   | 40,0                | 0,136                | 1,897         | 0,00           |
| 45          | 0,840   | 32,6                | 0,136                | 1,913         | 0,00           |
| 55          | 0,834   | 22,5                | 0,135                | 1,945         | 0,00           |
| 65          | 0,828   | 16,2                | 0,135                | 1,976         | 0,00           |
| 75          | 0,822   | 12,2                | 0,134                | 2,007         | 0,00           |
| 85          | 0,815   | 9,4                 | 0,134                | 2,039         | 0,00           |
| 95          | 0,809   | 7,5                 | 0,133                | 2,070         | 0,00           |
| 100         | 0,806   | 6,7                 | 0,133                | 2,085         | 0,00           |
| 105         | 0,803   | 6,1                 | 0,133                | 2,101         | 0,00           |
| 115         | 0,797   | 5,0                 | 0,132                | 2,133         | 0,01           |
| 125         | 0,791   | 4,2                 | 0,131                | 2,164         | 0,01           |
| 135         | 0,786   | 3,6                 | 0,131                | 2,195         | 0,02           |
| 145         | 0,780   | 3,1                 | 0,130                | 2,227         | 0,03           |
| 155         | 0,774   | 2,7                 | 0,130                | 2,258         | 0,05           |
| 165         | 0,768   | 2,4                 | 0,129                | 2,290         | 0,08           |
| 175         | 0,762   | 2,2                 | 0,129                | 2,321         | 0,12           |
| 185         | 0,756   | 1,9                 | 0,128                | 2,352         | 0,18           |
| 195         | 0,750   | 1,8                 | 0,128                | 2,384         | 0,27           |
| 205         | 0,746   | 1,6                 | 0,127                | 2,415         | 0,39           |
| 215         | 0,740   | 1,5                 | 0,127                | 2,446         | 0,55           |
| 225         | 0,734   | 1,4                 | 0,126                | 2,478         | 0,79           |
| 235         | 0,728   | 1,3                 | 0,125                | 2,509         | 1,08           |
| 245         | 0,722   | 1,2                 | 0,125                | 2,540         | 1,48           |
| 255         | 0,716   | 1,1                 | 0,124                | 2,572         | 2,00           |
| 265         | 0,710   | 1,0                 | 0,124                | 2,603         | 2,65           |
| 275         | 0,704   | 1,0                 | 0,123                | 2,634         | 3,51           |
| 285         | 0,698   | 0,9                 | 0,123                | 2,666         | 4,58           |
| 295         | 0,692   | 0,9                 | 0,122                | 2,697         | 5,94           |
| 305         | 0,686   | 0,8                 | 0,122                | 2,728         | 7,62           |
| 315         | 0,680   | 0,8                 | 0,121                | 2,760         | 9,70           |

The values quoted are typical of normal production. They do not constitute a specification.

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