

## Autonics Heat Transfer Oil - AEHT-32

Premium High-Thermal Stability Heat Transfer Fluid

PRODUCT CODE: AEHT-32

INDUSTRY

Shell Thermia B / Mobiltherm 605

CROSS-REF:

### 1. PRODUCT DESCRIPTION

**Autonics Heat Transfer Oil - AEHT-32** is a premium quality, high-performance mineral-based heat transfer fluid engineered for use in closed, indirect heating systems. Formulated from highly refined, thermally stable paraffinic base stocks, it is designed to deliver superior heat transfer efficiency, exceptional resistance to thermal cracking, and low volatility. It ensures reliable heat circulation under high operating temperatures while actively minimizing sludge and carbon deposit formation.

### 2. FEATURES AND BENEFITS

- **Exceptional Thermal Stability:** Strongly resists thermal cracking and decomposition at elevated system temperatures.
- **High Heat Transfer Efficiency:** Low viscosity and optimum thermal conductivity allow rapid heat distribution and lower energy consumption.
- **Advanced Oxidation Control:** Prevents fluid thickening, carbon coking, and sludge buildup, ensuring clean operating internal surfaces.
- **Low Volatility:** Minimizes vapor pressure at high temperatures, reducing oil loss and vapor-lock hazards in circulating pumps.
- **Excellent Low-Temperature Fluidity:** Enables hassle-free startup operations in colder environmental conditions.
- **Non-Corrosive Integrity:** Fully compatible with iron, steel, copper, and typical structural components used in industrial boilers.

### 3. APPLICATIONS

- Closed-loop indirect heating and cooling systems equipped with forced circulation mechanisms.
- Manufacturing processes including textile mills, chemical processing plants, asphalt paving systems, and plastic/rubber molding industries.
- Continuous operation systems running at maximum bulk oil temperatures up to 300°C (with skin temperatures up to 320°C).

### 4. TYPICAL CHARACTERISTICS

| PROPERTY                            | TEST METHOD | TYPICAL VALUE |
|-------------------------------------|-------------|---------------|
| Product Code                        | —           | AEHT-32       |
| ISO Viscosity Grade                 | ISO 3448    | 32            |
| Kinematic Viscosity @ 40°C (cSt)    | ASTM D445   | 32.0          |
| Kinematic Viscosity @ 100°C (cSt)   | ASTM D445   | 5.4           |
| Viscosity Index                     | ASTM D2270  | 102           |
| Flash Point (PMC), °C               | ASTM D93    | 215           |
| Fire Point, °C                      | ASTM D92    | 240           |
| Pour Point, °C                      | ASTM D97    | -12           |
| Density @ 15°C (kg/m <sup>3</sup> ) | ASTM D4052  | 868           |
| Max. Recommended Bulk Temp.         | —           | 300°C         |
| Max. Recommended Film Temp.         | —           | 320°C         |

### 5. HEALTH, SAFETY & PACKAGING OPTIONS

**Health & Safety:** Avoid prolonged or repeated skin contact. Wear protective gloves and safety eyewear during maintenance or fluid changeovers. Refer to the Material Safety Data Sheet (MSDS) for complete safe handling, environmental disposal, and safety guidelines.

**Packaging Formats:** Supplied commercially in high-grade industrial \*\*20-Liter Pails\*\* and heavy-duty \*\*208-Liter Drums\*\* to ensure product purity and ease of storage.

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