

## **HYTHERM 500 & 600**

#### **DESCRIPTION**

HPCL markets thermic fluids under the brand names of HYTHERM. These grades are developed to provide performance in broad range of application in textile, chemical, paint & varnish and petrochemical industries. These grades are formulated from specially derived petroleum base stocks having exceptional resistance to degradation during high temperature use. With thousands of satisfied customers over the years and millions of liters of Thermic fluid sold and repeat orders being executed HYTHRM grades command market leadership in thermic fluids segments.

HYTHERM is undoubtedly the first choice for all customers. HPCL has its own lube base oils which ensures consistency in quality of Lube base oils leading to uniformity of the finished oil parameters.

#### **HYTHERM 500**

The product is manufactured from petroleum stocks produced by special refining process in which the thermally unstable components are removed. HYTHERM 500 is recommended in service involving a maximum bulk oil temperature of 290°C. In addition, it has the following benefits.

- Excellent oxidation & chemical stability
- Good heat transfer properties
- Low volatility
- Non-corrosive and non-toxic

#### **HYTHERM 600**

This grade is derived from the finest quality petroleum base stocks and is fortified with high performance additives to enhance performance at higher temperatures. It has the following outstanding features.

- Ability to provide superior performance in indirect closed fluid heat transfer system up to bulk operating temperature up to 320°C
- Increased life, reduced oxidation and thermal degradation
- Minimal fouling and deposit formation on heat transfer surface. Hence sustained heat transfer characteristics

**APPLICATION AREAS:** All types of heat transfer applications. This grades finds extensive application in textile, pharmaceuticals, chemical and processing industries.



# **HYTHERM 500 & 600**

| PROPERTIES                                     | TYPICAL VALUES |                |
|--|----------------|----------------|
|  | HP HYTHERM 500 | HP HYTHERM 600 |
| Kinematic Viscoslty @ 40 °C, cSt               | 27-35          | 27 -38         |
| Flash Point (COC), °C, Min                     | 204            | 220            |
| Viscosity Index                                | 95             | 100            |
| Pour Point °C Max                              | 0              | 0              |
| Copper Strip Corrosion 3Hr @ 100°C (ASTM), Max | 1              | 1              |
| Neutralisation Number mg KOH/g, Max            | 0.15           | 0.15           |
| Specific Heat Kcal /Kg °C at                   |                |                |
| 260°C  | 0.731          | 0.741          |
| 280°C  | 0.751          | 0.761          |
| 300°C  | 0.772          | 0.791          |
| Thermal Conductvity, Kcal/Hr-Mt °C at          |                |                |
| 260°C  | 0.097          | 0.100          |
| 280°C  | 0.096          | 0.099          |
| 300°C  | 0.095          | 0.097          |

### **PERFORMANCE BENEFITS:**

- Excellent oxidation & chemical stability
- Low volatility, low vapor pressure
- Non corrosive & non toxic
- Excellent thermal conductivity