

# THERMAL-LUBE

## FIRE-RESISTANT HYDRAULIC AND CIRCULATING FLUID

# XL5168

July 2022

**XL5168** is a non-hydrous synthetic fluid, formulated with organic esters. This product is ideal for high-temperature applications including metallurgy, steel mills, forges, foundries, and in the aluminum industry.

Because of its high auto-ignition point (over 450°C), XL5168 can be used to avoid the dangers posed by conventional mineral-based oils. **XL5168** is also self-extinguishing.

**XL5168** is miscible with mineral oils and elastomers (except for Butyl). **XL5168** can also be used with most hydraulic pumps and installations that use conventional oil, without requiring any major modifications. Check with the manufacturer before making any modifications, as doing so may void the manufacturer's warranty.

**XL5168** is classified as Biodegradable and Non-toxic, with a rating of **PW1**.

### Advantages

- Antiwear, antifoam, demulsibility, and deaeration properties
- Low pour point
- High auto-ignition point
- High viscosity index
- Excellent thermal stability

### TYPICAL SPECIFICATIONS

| Product Code: XL5168   | /032      | /046      | /068       | /100        |
|--|-----------|-----------|------------|-------------|
| ISO Grade  |           |           |            |             |
| Viscosity (cSt @ 40°C) (ASTM D445)<br>cSt @ 100°C) (ASTM D445) | 35<br>7.7 | 46<br>9.6 | 73<br>13.3 | 110<br>18.0 |
| Viscosity index (ASTM D2270)                                   | 199       | 200       | 186        | 182         |
| Flash Point (°C)   | > 290     | > 290     | > 290      | > 290       |
| Fire Point (°C)  | 344       | 349       | 376        | 380         |
| Auto-ignition Point (°C)                                       | >450      | >450      | >450       | >450        |
| Pour Point (°C) (ASTM D97)                                     | -26       | -21       | -27        | -24         |
| Specific Gravity (g/ml @ 25°C)                                 | 0.92      | 0.92      | 0.92       | 0.92        |
| AFNOR filterability  | 1         | 1.2       | 1.5        | 1.1         |
| Shell 4-ball Wear Test, 40kg                                   | 0.65      | 0.6       | 0.65       | 0.35        |
| Colour   | Blonde    |           |            |             |



255 Ave Labrosse, Pointe-Claire, Québec, Canada H9R 1A3

T: +1.514.694.5823; [www.thermal-lube.com](http://www.thermal-lube.com)

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# THE THERMAL-LUBE

FIRE RESISTANT, BIODEGRADABLE,  
FACTORY MUTUAL APPROVED  
HYDRAULIC FLUID

## XL5168

| Comparison                               | Condat D46   | Quintrolubric 888-FR48  | Best   |
|--|--------------|---|--------|
| Flash Point °C:                          | 324          | 300   | Condat |
| Pour point °C:                           | -27          | <-30  | Equal  |
| Non-Compatibility Seals:                 | Butyl        | Butyl<br>Ethylene propylene<br>Poorly compatible<br>with Neoprene | Condat |
| Air Release (minutes):                   | 4            | 7   | Condat |
| Viscosity Index:                         | 200          | 190   | Condat |
| Density @20 °C:                          | 0.92         |   | Equal  |
| Density @15 °C:                          |              | 0.92  | Equal  |
| Water separation (ml-ml-ml (min)):       | 40-40-0 (20) | 41-39-0 (30)  | Condat |
| Viscosity cSt @ 40 °C:                   | 47           | 47.5  | Equal  |
| Viscosity cSt @ 100 °C:                  | 9.2          | 9.5   | Equal  |
| Protection against corrosion ASTM D665A: | 1A           | 1A  | Equal  |
| Gear lubrication FZG:                    | 12           | 12  | Equal  |
| Biodegradability after 28 days (%):      | 100          | 86.5  | Condat |

Comparison study between XL5168/046 (Condat D-46) with Quaker Quintrolubric 888-FR48



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