



# **J-Cut NCL-9**

Cutting and grinding oil

## Description

**J-Cut NCL 9** is a transparent, low viscosity mineral oil containing boundary lubricants and free sulfur to impart extreme pressure properties. It is designed primarily for deep hole drilling, boring and trepanning where pressurized coolant systems are used. **J-Cut NCL 9** is also suitable for high-speed hobbing and gear shaving techniques.

### **Performance Benefits**

- High flash point, good oxidation stability and high viscosity index
- Low viscosity is suitable for high pressure applications
- Anti wear properties

#### **Recommended Applications**

|                                 |      |             | High alloyed    |          |          |        |
|---------------------------------|------|-------------|-----------------|----------|----------|--------|
|                                 | Cast | Low-medium  | steel/nickel-   | Titanium | Aluminum | Yellow |
|                                 | Iron | alloy steel | chromium alloys | alloys   | alloys   | metals |
| Honing/Superfinishing           | -    | -           | -               | -        | -        | -      |
| Grinding                        | -    | x           | Х               | Х        | -        | -      |
| Drilling                        | -    | x           | Х               | Х        | -        | -      |
| Broaching/Gear<br>manufacturing | -    | x           | -               | -        | -        | -      |
| General machining               | -    | x           | X               | Х        | -        | -      |

### **Characteristics**

| Properties        | Unit          | Test Method | Value              |  |
|-------------------|---------------|-------------|--------------------|--|
| Appearance        | -             | Visual      | Light amber liquid |  |
| Density @ 15°C    | Lbs/gal       | -           | 7.6                |  |
| Viscosity @ 40°C  | cSt           | ASTM D446   | 25                 |  |
| Viscosity @ 100°F | SUS           | ASTM D446   | 120                |  |
| Flash Point       | °F            | ASTM D92    | >350°F             |  |
| Copper corrosion  | 3 hr at 100°C | ASTM D130   | 4c                 |  |

|           | Ester | Active<br>Sulfur | Inactive<br>Sulfur | Phosphorous | Calcium | Chlorine | Zinc |
|-----------|-------|------------------|--------------------|-------------|---------|----------|------|
| Additives | х     | х                | x                  | x           | х       | -        | -    |