

SUPER MULPUS DX

HIGH-PERFORMANCE MULTIPURPOSE LUBRICATING OIL FOR INDUSTRIAL MACHINERY

SUPER MULPUS DX is a high-grade industrial lubricating oil blended from highly solvent-refined paraffinic base oils and carefully selected additives. Its outstanding performance meets the requirements for bearing oils, gear oils, hydraulic oils and slideway oils for general-purpose industrial machinery, and it was developed with top-quality features normally found only in specialty oils. Because SUPER MULPUS DX is a multipurpose industrial oil, it is ideal for streamlining lubrication management in factories.

● SPECIAL FEATURES

1. Excellent Lubrication

SUPER MULPUS DX has an excellent anti-wear and extreme-pressure performance, so it provides excellent lubrication.

2. Outstanding Oxidative and Thermal Stability

Because SUPER MULPUS DX is blended from highly refined based oils with outstanding oxidative and thermal stability as well as carefully selected oxidation inhibitors, it suffers very little oxidative degradation or sludge formation even when used for long periods of time. It provides especially good oxidative stability at high temperatures, so it performs extremely well even in hot circulation systems.

3. Excellent Separation from Water and from Water-soluble Cutting Fluids

Thanks to SUPER MULPUS DX's excellent ability to separate water, it is easy to remove a moderate amount of water from the oil by letting the oil stand or by using a centrifugal separator.

4. Outstanding Rust Prevention

SUPER MULPUS DX is blended with top-quality antirust additives, so it prevents rust and corrosion in the lubrication system even when moisture becomes mixed with the oil.

5. Excellent Antifoaming Performance

SUPER MULPUS DX is also blended with high-performance defoaming agents, so it prevents circulation problems caused by foaming.

● GRADES

SUPER MULPUS DX comes in twelve grades: 2, 5, 10, 22, 32, 46, 68, 100, 150, 220, 320, and 460. These numbers indicate the ISO viscosity grade.

This wide range of viscosity grades means that SUPER MULPUS DX is available in the proper viscosity for any application.

● APPLICATIONS

1. Lubrication of many types of bearings for steel and nonferrous metal rolling mills, rubber and plastic rolls, calender rolls, papermaking machines, electric motors, generators, pumps, fans, etc.
2. Lubrication of many types of transmissions
3. Hydraulic systems
4. Many types of lubrication for machine tools (bearings, gears, hydraulics, slideways)
5. Oil circulation systems for gears and bearings that are susceptible to rust and oil degradation
6. Lubrication of bearings in textile machinery and other high-speed rotating machinery
7. Hydraulic oil for instruments and remote-controlled hydraulic devices

● SHIPPING CONTAINERS

200-liter drums and 20-liter cans.

TYPICAL PROPERTIES OF SUPER MULPUS DX

| Grade of SUPER MULPUS DX | 2 | 5 | 10 | 22 | 32 | 46 |
|--|---------|---------|---------|---------|---------|---------|
| Color (ASTM) | L0.5 | L0.5 | L0.5 | L0.5 | L0.5 | L1.0 |
| Density (15°C), g/cm ³ | 0.833 | 0.842 | 0.845 | 0.860 | 0.870 | 0.874 |
| Kinematic viscosity (40°C), mm ² /s | 2.20 | 4.45 | 9.65 | 21.9 | 31.9 | 46.5 |
| (100°C), mm ² /s | 1.01 | 1.60 | 2.60 | 4.32 | 5.43 | 6.90 |
| Viscosity index | — | — | 99 | 103 | 105 | 104 |
| Flash point (COC), °C | 108 | 118 | 162 | 225 | 230 | 238 |
| Pour point, °C | -30 | -30 | -30 | -35 | -30 | -30 |
| Copper strip corrosion (100°C, 3 h) | 1 | 1 | 1 | 1 | 1 | 1 |
| Rust prevention (distilled water, 60°C, 24 h) | No rust | No rust | No rust | No rust | No rust | No rust |

| Grade of SUPER MULPUS DX | 68 | 100 | 150 | 220 | 320 | 460 |
|--|---------|---------|---------|---------|---------|---------|
| Color (ASTM) | L1.0 | L1.0 | L2.0 | L3.0 | L3.0 | L3.5 |
| Density (15°C), g/cm ³ | 0.882 | 0.888 | 0.892 | 0.895 | 0.900 | 0.910 |
| Kinematic viscosity (40°C), mm ² /s | 68.2 | 100 | 158 | 216 | 320 | 473 |
| (100°C), mm ² /s | 8.88 | 11.2 | 15.4 | 19.0 | 24.3 | 31.4 |
| Viscosity index | 103 | 97 | 98 | 99 | 97 | 97 |
| Flash point (COC), °C | 260 | 270 | 278 | 284 | 302 | 320 |
| Pour point, °C | -22.5 | -22.5 | -22.5 | -12.5 | -12.5 | -12.5 |
| Copper strip corrosion (100°C, 3 h) | 1 | 1 | 1 | 1 | 1 | 1 |
| Rust prevention (distilled water, 60°C, 24 h) | No rust | No rust | No rust | No rust | No rust | No rust |



Handling Precautions

▼ Follow the following precautions when handling this product.

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| <p>! CAUTION</p> <p>Handling Precautions</p> | <ul style="list-style-type: none"> ● <u>Inflammation can occur if oil enters the eyes.</u> When handling this oil, wear <u>protective goggles</u> or take other measures to <u>prevent eye contact</u>. ● <u>Inflammation can occur if oil comes into contact with skin.</u> When handling this oil, wear <u>protective gloves</u> or take other measures to <u>prevent skin contact</u>. ● Do not drink this oil. (Swallowing this oil can cause diarrhea and nausea.) ● <u>Keep out of reach of children.</u> ● Read the Material Safety Data Sheet (MSDS) for this product before using the product. Please request the Material Safety Data Sheet where you purchased the product. |
| <p>First Aid</p> | <ul style="list-style-type: none"> ● In case of eye contact, rinse eyes thoroughly with clean water and consult with a physician. ● In case of skin contact, wash skin thoroughly with soap and water. ● If this oil is swallowed, do not induce vomiting. Consult with a physician immediately. |
| <p>Disposal of Used Oil and Containers</p> | <ul style="list-style-type: none"> ● Do not apply pressure to empty containers. The containers may burst if pressure is applied. ● Do not weld, heat, drill, or cut the containers. The remaining oil may ignite and the containers may explode. ● Follow all applicable laws and regulations when disposing of used oil or containers. If you are unsure of the proper disposal methods, consult first with the seller of the oil. |
| <p>Storage Method</p> | <p>Seal the container tightly after use in order to prevent dirt, moisture, etc., from entering the oil. Store in a dark location. Avoid direct sunlight.</p> |