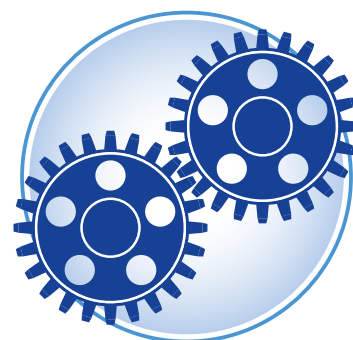


# Epona Z 220

Mineral oils for enclosed gears.



| APPLICATIONS                         |
|--------------------------------------|
| Enclosed gears, bearings, couplings. |
| Bevel and spur gears.                |
| Bearings and gear couplings.         |
| Worm gears.                          |

| FEATURES AND BENEFITS   |
|---|
| Epona Z 220 has been specially designed for lubricating enclosed gears operating under severe conditions. |
| Excellent extreme-pressure and anti-wear properties.  |
| Perfect seal compatibility.   |

| SPECIFICATIONS AND APPROVALS |                               |   |                           |
|------------------------------|-------------------------------|---|---------------------------|
| ✓                            | DIN 51517/3 - CLP             | ✓ | JIS K2219. 2006 (Class 2) |
| ✓                            | ISO 12925-1 CKSMP             | ✓ | David Brown S1.53.101 E   |
| ✓                            | AGMA 9005 – F 16 Antiscuffing |   |                           |

| TECHNICAL DATA : EPONA Z 220 |              |                    |                 |
|------------------------------|--------------|--------------------|-----------------|
| CHARACTERISTICS              | METHODS      | UNITS              | TYPICAL VALUES* |
| Density at 15°C              | ISO 3675     | kg/m <sup>3</sup>  | 895             |
| Viscosity at 40°C            | ISO 3104     | mm <sup>2</sup> /s | 220             |
| Viscosity at 100°C           | ISO 3104     | mm <sup>2</sup> /s | 19              |
| Viscosity Index              | ISO 2909     | –                  | 97              |
| Pour Point                   | ISO 3016     | °C                 | - 18            |
| Flash Point (OC)             | ISO 2952     | °C                 | 244             |
| FZG Micropitting             | FVA 54       | Fail stage         | 10 high         |
| FZG A/8.3/90                 | DIN 51 354/2 | Fail stage         | 14 pass         |
| GFT Class                    | –            | –                  | –               |

\*The specifications above are for illustrative purposes and communicated for information only.

## CUSTOMER BENEFITS

|   |   |
|---|---|
| ✓ | Excellent chemical stability and resistance to oxidation, for a long period of running without maintenance. |
| ✓ | Outstanding protection to rust and corrosion of copper alloys.  |
| ✓ | Very good resistance to foaming and emulsion formation.   |

## GENERAL RECOMMENDATIONS

### COMPATIBILITY

Compatibility should be checked.

Please consult your Marine Lubrication Engineer should you have any questions.

### STORAGE

This product should be stored under cover in clean, dry conditions and protected from frost.

Recommended storage temperature range is 5°C to 50°C.

Drums that are stored on deck should be raised on pallets and covered to protect from the elements.

## COMPLIMENTARY PRODUCTS AND SERVICES

|   |   |
|---|---|
| ✓ | LubDiag – Oil Analysis – Laboratory based used oil analysis program.  |
| ✓ | LubInsight – Suite of onboard testing equipment.  |
| ✓ | LubSkills – Lubmarine Engineers are on hand at worldwide locations to assist with lubrication concerns.   |
| ✓ | Lub On Ship – Visualize your lubricants needs aboard Lubmarine's innovative virtual vessel.<br><a href="http://lubmarine.totalenergies.com/lube-on-ship">lubmarine.totalenergies.com/lube-on-ship</a> |

