

# VANLUBE® 289HD

### Friction Reducer/ Antiwear

TECHNICAL DATA

**VANLUBE® 289HD** is an enhanced version of **VANLUBE 289**, with the same excellent friction reducing and antiwear properties, but with corrosion protection geared for heavy duty diesel engine oils and other lubricant applications where high temperature corrosion is a concern. This ashless additive is free of sulfur and phosphorus making it an ideal candidate for low SAP applications.

## **CHEMICAL COMPOSITION -**

Inhibited borated ester amide

## - TYPICAL PROPERTIES -

| Physical State            | Liquid |
|---------------------------|--------|
| Appearance                | Amber  |
| Density at 25°C, Mg/m²    | 0.965  |
| Viscosity at 40°C, mm²/s  | 300    |
| Viscosity at 100°C, mm²/s | 15     |
| Nitrogen content, %       | 6.2    |
| Boron, %                  | 0.7    |

\*The analytical data listed above are not specifications

## - APPLICATIONS -

- Engine Oils
- Racing Oils
- Gear Oils
- Automatic Transmission Fluids
- Greases
- Metal Working Fluids

## - RECOMMENDED TREAT RATES

• Typical range is 0.1 to 1.0 wt. % but can vary based on formulation style and application

#### **ADVANTAGES** -

- Offers ease of handling as low viscosity liquid
- Imparts corrosion-inhibiting properties to lubricating oils
- Offers multifunctionality as a light colored additive that reduces friction and wear in finished lubricants
- Synergizes with other friction reducers and antiwear additives
- Provides utility in low SAP applications that require sulfur and phosphorus-free additives

#### **SOLUBILITY** ·

Soluble in mineral and synthetic base oils

#### - STANDARD PACKAGING -

425 lb. metal drums

#### HANDLING AND STORAGE -

Please refer to Section 7 of the SDS for handling and storage information.

#### Additional handling and storage information:

Suggested pumping temperature is 25°C.

Short and long term maximum handling temperatures are 80°C and room temperature respectively.

**VANLUBE® 289HD** can separate, crystallize or form a gel when exposed to low temperatures. If this occurs, heat to 80°C and mix thoroughly before use.

#### **REGISTRATION** -

Please refer to section 15 of SDS for regulatory information.

#### **CONTACT INFORMATION** -

For samples, product information and/or technical service, please contact Vanderbilt Chemicals, LLC or the Vanderbilt representative in your area:

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