

# Focus Ester PA 2500

## PRODUCT DESCRIPTION

### Polymerized High Viscosity Branched-Chain Fatty Ester

**Focus Ester PA 2500** is a synthetic polymerized ester designed to boost performance and enhance finish in severe metalworking applications. It is a high molecular weight ester designed to offer the highest lubricity available and it has a molecular weight that gives it a perfect structure to replace chlorinated paraffins. **Focus Ester PA 2500** is a branched-chain fatty acid, which offers the highest level of thermal and hydrolytic properties. Also, it is expected to be less susceptible to bacterial attack than conventional fatty esters. In addition to replacing chlorine, **Focus Ester PA 2500** can be used to replace or reduce treat levels of all other EP additives, like phosphorous, inactive sulfur, active sulfur, lard oil, blow oil and other fatty friction modifiers. The product's high viscosity and viscosity index provides high film strength making it an ideal additive for metal forming applications.

## APPLICATIONS

**Focus Ester PA 2500** is formulated into emulsion systems like soluble oils, semi-synthetic, drawing and stamping and other water-dilutable fluids to provide exceptional lubricity. Treatment levels of 1% to 15% into the concentrate are suggested. **Focus Ester PA 2500** can be used in straight cutting oil and industrial lubricant oil applications in combination with or without low amounts of active sulfur and phosphorus, depending upon the severity of the operation. **Focus Ester PA 2500** can replace or reduce the amount of chlorine, sulfur, blow oil, lard oil and other fatty friction modifiers.

## BENEFITS

- Ashless: will not cause staining
- Light in color with no odor
- High degree of saturation
- Replaces fats and fatty compounds
- Offers dual purpose capability for cutting and hydraulics
- Very low iodine value
- Excellent thermal, oxidative and hydrolytic stability

## TYPICAL PROPERTIES

Feature	Unit	Standard Value
Appearance @ 30 °C	-	Clear viscous amber liquid
Specific gravity @ 25 °C	-	1.0
Acid number	mg KOH/g	3
Viscosity @ 40 °C	cSt	11,000
Viscosity @ 100 °C	cSt	800
Viscosity Index	-	275

## PACKAGING

Packaging	Description	Net Weight
Drums	55 gallon non-returnable	435 lbs
Totes	275 gallon non-returnable	2,175 lbs

## HANDLING, SAFETY, HEALTH AND ENVIRONMENT

See safety data sheet

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