

PRODUCT INFORMATION

ECOSE® C-V CUTTING OILS

Light colored, high quality active sulfur cutting oils

ECOSE® C-V Cutting Oils are light colored, active cutting oils designed for use in moderate to severe machining operations. These new *clear view* cutting oils are formulated with optimum levels of extreme pressure (EP) additives in the form of sulfur and chlorine. These EP additives react with the metal surface under high temperature and pressure to form a protective surface film at the chip-tool interface.

ECOSE® C-V Cutting Oils are formulated with a new synthetic wetting agent that helps significantly in holding down friction while providing an excellent surface finish on materials with low machineability ratings. **ECOSE® C-V Cutting Oils** offer a new *clear view* forward in cutting oil technology.

FEATURES AND BENEFITS:

- **ECOSE® C-V 40C** is a low viscosity cutting oil particularly suited for deep hole drilling, grinding, and other metalworking applications where a low viscosity, EP cutting oil is required. Loss of oil due to carry off is minimal.
- **ECOSE® C-V 80C** is a low viscosity cutting oil compounded with excellent anti-weld properties making it an ideal choice for deep-hole or gun drilling applications on difficult to machine metals and alloys. It is transparent on the work piece, allowing good visual inspection of machined parts.
- **ECOSE® C-V 190C** is an active, light colored, severe duty fluid formulated to provide strong performance where moderate to severe machining is required. The high level of extreme pressure (EP) additive coupled with synthetic fatty oil make this product ideal for a broad range of machine tool operations, including: threading, tapping, broaching, milling and where a high level of surface finish is a must.
- **ECOSE® C-V 250C** has the highest level of EP of all the products in this series and can be used where most other cutting oils fail. Contains active sulfur, chlorine and other anti-weld components along with high level of lubricity. Recommended for severe machining operations such as broaching, tapping and cold-heading.

Typical Properties

Grade		C-V 40C	C-V 80C	C-V 190C	C-V 250C
Product Code	Test Method	535318	535320	535325	535330
Viscosity cSt @ 40°C	ASTM D 445	8.2	15.0	39.0	53.0
Viscosity SUS @ 100°F	ASTM D 2161	40	75	190	250
Flash Point, COC, °F	ASTM D 92	290	305	325	360
Specific Gravity, 60°F		0.839	0.851	0.863	0.878
Four Ball EPWeld Point, kgf	ASTM D 2783	500	500	620	620
Load Wear Index		86	86	95	95
Sulfur, %		Present	Present	Present	Present
Chlorine, wt%		Present	Present	Present	Present
Fat Oil, %		Present	Present	Present	Present
Phosphorus, wt%		None	None	None	Present

Note: **ECOSE® C-V Cutting Oils** contain elevated amounts of active sulfur that will stain soft metals such as brass, bronze, copper and aluminum. Their use in machining applications where these metals are present and staining is an issue should be avoided.

AVAILABILITY:

ECOSE® C-V Cutting Oils are available throughout Nu-Tier Brand’s marketing area. Your Nu-Tier representative can provide specific information. Need additional information? Call Nu-Tier Brands @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com.