



SHELL FENELLA[®] OIL DS 4470

Water soluble drawing oil

Product Description

Shell Fenella Oil DS 4470 is a highly chlorinated, heavy-duty, emulsifiable drawing oil for very severe drawing operations on heavy gauge carbon and stainless steels.

Shell Fenella Oil DS 4470 contains film strength agents to impart heavy duty forming characteristics. It is inhibited to protect parts and press components from corrosion.

Shell Fenella Oil DS 4470 provides a strong, non-gumming organic lubricating film to carry through multiple die operations. It can be applied by spray, drip, swab or roller coat. Shell Fenella Oil DS 4470 can be used straight or diluted in water up to 10% concentration, depending upon difficulty of the operation.

Applications

- heavy duty drawing operations on heavy gauge carbon and stainless steels
- progressive die operations

Features and Benefits

- can be used neat or diluted allowing it to be used in very severe operations or less severe operations
- contains ingredients which help it to be readily removed from parts with mild alkaline cleaners
- high level of extreme pressure additives plus resistance to wiping makes Shell Fenella Oil DS 4470 ideal for severe drawing operations and progressive dies

Typical Properties of Shell Fenella Oil DS 4470

	Test Method	
Product Code (drums)		5064235
Appearance	Visual	Clear, amber, viscous liquid
Viscosity, cSt @ 40°C		500
pH @ 10% in DI water		9.0
Chlorine		High
Density, lbs/gal		9.34

Concentration Control

Concentration can easily be determined by using a refractometer and referring to the chart below. Readings must be corrected using water as a baseline.

<u>Reading</u>	<u>% Concentration</u>	<u>Water:Product Ratio</u>
5.0	5	19:1
10.0	10	9:1
15.0	15	5.7:1
20.0	20	4:1
25.0	25	3:1
30.0	30	2.3:1
35.0	35	1.9:1
40.0	40	1.5:1
45.0	45	1.1:1
50.0	50	1:1

Handling and Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.equivashellmsds.com>. If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please call **1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: <http://www.shell-lubricants.com/>.