

BONDERITE L-FG F 31 ACHESON GRAPHITE FORGING LUBRICANT

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(KNOWN AS DELTAFORGE F 31)



Product Description

BONDERITE L-FG F 31 is the world's most widely used forging die lubricant. It contains a unique graphite particle size and configuration, along with a special stabilizer and binder system. These properties produce excellent lubricity and release, faster wetting, higher dilution ratios and longer die life.

Applications

BONDERITE L-FG F 31 is formulated for use on difficult press work and highly automated processes including hot, warm and precision forging.

As the industry benchmark for performance, BONDERITE L-FG F 31 is used across Automotive, Aerospace and Industrial markets.

Benefits

- Excellent dispersion stability resulting in little or no settling in the concentrate
- Ultra-fine graphite and proprietary binder chemistry produces faster substrate wetting
- Offers higher dilution ratios and longer die life
- Excellent lubricity and release
- Less billet material needed
- Wets dies up to 371°C (700°F)
- Increased die life resulting in lower overall cost per forging

Characteristics

Property	Typical Value
Lubricant	Ultra-fine Graphite
Carrier	Water
Solids Content	17.8 – 18.2 %
pH of Concentrate	11.0 – 11.5
Density	9.2 lbs. / gallon
Freezing Point	32 °F
Viscosity (Brookfield)	700-1,000 cP



Operating and Control Procedures

Recommended Use Concentrations

Operation	Concentration
Initial trials	1:10
Typical range	1:20
Severe operations	1:3

Dilution

BONDERITE L-FG F 31 is supplied as a concentrate and can normally be diluted with ordinary tap water prior to use. The dilution ratio varies according to the difficulty of the job and the degree of cooling.

Important: Add water to concentrate, not the reverse. Stir the concentrate thoroughly then slowly add one-part water while stirring until the mixture is homogenous. The remaining water may be added rapidly while stirring until the desired dilution and consistency are reached.

Application

For best results BONDERITE L-FG F 31 should be applied by conventional spray techniques. Spray application provides uniform coating thickness, complete die coverage and lower friction values.

Other Information

Protect from freezing during transit and storage.

Please refer to Safety Data Sheet for detailed health and safety information.

For more detail on this product or Henkel's capabilities contact your local account representative or Customer Service via the phone number below.



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