

FENELLA FLUID F 1850 G

Water and graphite based hot forging release agent

DESCRIPTION

FENELLA FLUID F 1850 G is a high quality water based graphite lubricant specially developed for difficult hot steel forging extrusion processes but is also used to forge alloys such as aluminium, titanium, nickel.

APPLICATIONS

FENELLA FLUID F 1850 G is a lubricant/release-agent based on water-dispersed graphite for very high performance use. The main application is steel hot & warm forging, but it can also be used for aluminium, copper, titanium & nickel stamping.

FENELLA FLUID F 1850 G shows exceptional adhesion at high temperatures and forms a film on the die/billet with superior release and lubricating properties due to its special particle size distribution. The film provides very good metal flow during deformation at high temperature and no residual build-up is left on the die.

RECOMMENDATION FOR USE

The dilution rate can vary according to the severity of application.

Die lubricant

Easy to Moderate forgings : 3 - 10 %

Difficult forgings : 10 - 20 %

Automatic or hand spray is recommended to obtain a uniform film on the die.

Billet Coating

Easy to moderate forgings 10 - 20%

Difficult forgings : 20 - 50%

can be used by spraying or by dipping to obtain a uniform film on the billet.

TYPICAL PHYSICAL PROPERTIES

Test	Typical Value	Test Method
Appearance	Black liquid	
Specific gravity @ 20°C	1,23	ASTM D 1475
pH	8,5-9,5	STC 10.0.0-37
Solid Lubricant	Synthetic graphite	
Viscosity BK-20°C mPa s	1800-2200	STC 10.0.0-29

BENEFITS

- Reduces costs and increases productivity - very high lubrication properties, reduces die wear, prevents pick-up and scoring, promotes good metal flow in hot operations on dies up to 400°C.
- Reduces inventory - suitable for a wide range of metals and applications.
- Easy to use - stable, fine particle size graphite dispersion, can be used as supplied or easily diluted with water to form a dispersion.
- Operator and Environmentally friendly - mineral oil and ammonia free

ADDITIONAL PRODUCT DATA

It is recommended that dilutions are made with suitable mixing equipment. If manually mixing, add water slowly to the product while mixing for best results. Most graphite dispersions should be stirred in use to ensure even dispersion of the graphite.

RELATED PRODUCTS

THERMEX GL lubricants are available for aerospace, power generation and medical forgings on titanium, nickel and other superalloys. Houghton specialises in products and services for Heat Treatment, Machining and Grinding, Cleaning, and Fire Resistant Hydraulic Fluids

STORAGE

Please refer to section 7 of Safety Data Sheets for handling and storage information, including product shelf life. Product should be stored under cover in clean, dry conditions and protected from frost. Recommended storage temperature is usually between 5°C and 40°C unless otherwise specified. Use stock in delivery rotation.

HEALTH AND SAFETY

Safety data sheets are available in accordance with Regulations (EC) No 1907/2006 Annex II and (EC) No 1272/2008.

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