

FENELLA FLUID F 3816 G

Water and graphite based hot forging release agent

DESCRIPTION

FENELLA FLUID F 3816 G is an aqueous graphite lubricant for hot forging of steel but is also used to forge alloys such as aluminum, copper, titanium, nickel.

APPLICATIONS

FENELLA FLUID F 3816 G is particularly recommended for long and difficult extrusion operations mainly due to physical-chemical parameters such as graphite particle size, purity and crystallinity.

FENELLA FLUID F 3816 G forms a dry film on high temperature dies with with high adhesion and excellent lubricating properties.

RECOMMENDATION FOR USE

The dilution rate can vary according the severity of application.

Easy to Moderate forgings : 3 - 10 %

Difficult forgings : 10 - 20 %

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

TYPICAL PHYSICAL PROPERTIES

Appearance	Black liquid	
Specific gravity @ 20°C	1.17	ASTM D 1298
pH	11.3	DIN 51396
Solid Lubricant	Synthetic graphite	
Viscosity BK-20°C (S05-20rpm) mPa s	600	

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 and Industrial Lubricants. For more information, please contact your local Houghton representative.

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 Regulation (EC) No 1907/2006 Annex II where a substance or preparation meets the criteria in accordance with Directives 67/548/EEC or 1999/45/EC.

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Houghton plc
Beacon Road, Trafford Park
Manchester M17 1AF

Tel +44 (0) 161 874 5000
Fax +44 (0) 161 874 5001
E-mail
uk.enquiries@houghtoneurope.com
<http://www.houghtonintl.com>

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