

FENELLA FLUID F 403

Water miscible synthetic hot forging lubricant (graphite free)

DESCRIPTION

FENELLA FLUID F 403 is a water soluble, graphite and oil free release-agent for hot forging of ferrous metals.

APPLICATIONS

FENELLA FLUID F 403 is used for medium difficulty hot forging of complex shapes, such as rocker arms, on mechanical presses.

FENELLA FLUID F 403 forms a white coating on the die with excellent release and lubricating properties. This coating allows a good metal flow during hot forging, leaving an adherent and resistant film on the die, even at high die temperatures.

RECOMMENDATION FOR USE

The percentage of use can vary depending on the degree of manufacturing difficulty and other parameters. Spray application is recommended.

Mechanical and friction presses : 5 - 20 %

FENELLA FLUID F 403 is compatible with the materials that are commonly used in machine tools.

TYPICAL PHYSICAL PROPERTIES

| | | |
|--|--------------------------|-------------|
| <i>Appearance</i> | <i>Colourless liquid</i> | |
| <i>Specific gravity @ 20°C</i> | 1.1 | ASTM D 1298 |
| <i>pH</i> | 7.5 | DIN 51396 |
| <i>Refractometer factor</i> | 3.9 | |
| <i>Viscosity BK-20°C (S05-20rpm) mPa s</i> | 2000 | |

BENEFITS

- Reduces costs and increases productivity - good forming properties, good release, reduces wear on the dies, low foaming, economical, clean surfaces on the metal surface after forging reduce subsequent cleaning operations.
- Easy to use - easy to mix with water and control with a refractometer, forms a stable solution that uniformly wets the die surface.
- Operator and Environmentally friendly - graphite and oil free for a clean working environment. Ammonia free for a pleasant working environment.

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.

RELATED PRODUCTS

THERMEX GL lubricants are available for aerospace 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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