



Product Data Sheet

Deltaforge™ 144/2 Smokeless forging lubricant

DESCRIPTION

Deltaforge 144/2 is a smokeless, water based die lubricant which, in addition to its excellent lubricating and release properties, possesses the ability to wet dies up to 450°C. Deltaforge 144/2 is one of a family of products specially designed for a wide range of press forgings and extrusion of steel and high duty alloys while containing no ammonia.

BENEFITS

- * excellent lubricating properties, for efficient die filling and controlled metal movement;
- * positive release properties, to eliminate stickers;
- * possibility of controlling die temperatures by adjusting dilution ratio;
- * rapid wetting and film-forming on the metal;
- * no build-up in the dies;
- * absence of smoke, fumes and toxic effects when sprayed onto hot metal;
- * economical in use due to high dilution ratio.

TYPICAL APPLICATIONS

Press forging and extrusion of steel and high duty alloys

PHYSICAL PROPERTIES

(as supplied)

Pigment :	graphite
Carrier :	water
Solids content :	ca. 41%
Viscosity (Brookfield, 20°C, 20 rpm) :	800-1500 mPa.s
Density :	1280 kg/m ³
Diluent :	water
pH :	ca. 8.5

METHOD OF USE

Pretreatment of dies

To obtain rapid formation of an adherent lubricating film, the dies should be degreased and then preheated to approximately 150°C.

Dilution

Deltaforge 144/2 is a concentrate and should be diluted with tap water before use. It is important to carry out dilution as follows:

- stir the product well in its original container before transferring to a suitable container;
- slowly add an approximately equal quantity of water, with constant stirring until the mixture is homogeneous;
- add the remaining water more rapidly, still stirring constantly.

Dilution ratio

The dilution varies according to the working conditions and the degree of cooling required. For initial trials the following ratios are recommended:

- for comparatively simple forgings of carbon steel: 1 part of Deltaforge 144/2 to 20 - 40 parts of water.
- for difficult deep profile carbon steel and high alloy forgings: 1 part of Deltaforge 144/2 to 10 parts of water.

Application

Deltaforge 144/2 should be applied by spray. Dag® Spray Equipment is particularly suitable.

Once the die has been "run-in" and the spray equipment properly adjusted, a further dilution may be tried for maximum economy.

STORAGE/ HANDLING

- * 24 months from date of qualification (under original seal)
- * Deltaforge 144/2 should be stored in a cool place and protected against freezing.

CONTAINER SIZES

25 kg O.H. drum
220 kg O.H. drum
950 kg MX-IBC

HEALTH & SAFETY

Please consult Material Safety Data Sheet.

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