

## DYLON DYFORGE™ 880 COLLOIDAL GRAPHITE FORGING LUBRICANT

### DESCRIPTION:

**DYFORGE™ 880** is a new, technologically innovative, ammonia free, smokeless, water-based forging lubricant that provides excellent performances in a wide range of forged products. This product is based on a new combination of ingredients recently developed in our Research Laboratories. Dylon scientists have specially processed a very lubricious form of graphite, activated its surfaces and reacted it with high temperature stable polymers. The result is a new, heretofore unavailable form of lubricant. This specially processed graphite has been combined in a water dilutable carrier with EP and anti-wear additives, binders, surfactants and stabilizers. We call the resultant chemistry **DYLON DYFORGE™ 880**.

During preliminary field trials, **DYFORGE™ 880** was found to eliminate buildup, and provide exceptional results with very difficult forgings. **DYFORGE™ 880** easily wets hot dies, coats uniformly, provides excellent release, and extends die life.

**DYFORGE™ 880** is an extremely stable product that does not settle or thicken in its concentrate state. This assures complete uniformity from top to bottom resulting in very reproducible and consistent working dilutions. The product has a relatively low viscosity. **DYFORGE™ 880** has excellent flow properties that allows for easy dispensing. Due to the particle size and additives used in **DYFORGE™ 880**, the product significantly decreases the amount of settling in press pits and feed lines. **DYFORGE™ 880** is used to forge hot and warm steels, high temperature alloys, net forgings, and powder metal parts.

As with all Dylon products, **DYFORGE™ 880** is manufactured in Dylon's ISO 9001:2000 certified, modern world-class production and research facility. This combination of advanced state-of-the-art chemistry and process controls assures our customers of the finest technologically advanced forging lubricants on the market today.

### CHARACTERISTICS:

<b>Carrier:</b>	Water	<b>Flash Point:</b>	N/A
<b>Lubricant:</b>	Graphite	<b>Density:</b>	9.3 lbs./gal.
<b>Viscosity:</b>	1100 cps	<b>pH:</b>	8.0 - 9.8
<b>Freeze Point:</b>	32°F	<b>VOC:</b>	0.0 g./l.
<b>Odor:</b>	Odorless	<b>Solids:</b>	23 %

## **APPLICATION:**

**DYLON DYFORGE™ 880** is supplied as a concentrate that may be diluted with plain tap water. The actual working dilution depends on the difficulty of the part to be forged. Initial dilutions should begin at the dilution of the forging lubricant currently used to make the part. Nonetheless, field data demonstrates that in most instances **DYFORGE™ 880** can almost always be further diluted than most graphitic products on the market today.

## **DILUTION:**

Unlike some forging lubricants, **DYFORGE™ 880** has the ability to be diluted by either adding the concentrate to the water, or adding water to the concentrate.

Studies have demonstrated that potable water with a high mineral content (hardness), does not normally affect the stability of the diluted lubricant. In addition, the use of reclaimed plant water has been used to dilute **DYFORGE™ 880** without any issues. Please contact your Dylon Technical Sales Representative for assistance.

## **DIE COATING:**

**DYFORGE™ 880** can be applied by swabbing or spraying. The most uniform and economical coatings are almost always applied by spraying. Both manual and robotic spray applications produce excellent lubricious coatings.

## **STORAGE:**

**DYFORGE™ 880** should be stored between 40°F and 125°F. Freezing usually destroys the colloidal nature of the graphite with a subsequent compromise in forging performance.

Keep containers tightly sealed to inhibit loss of carrier fluids and prevent contamination.

If you have questions, or would like assistance running a test, please call 1-800-237-8246 and ask for Technical Assistance.

## **PACKAGING:**

45 lb. pails (20.5 kg.)

500 lb. drums (227.2 kg.)

Intermediate bulk containers (3000 lbs.)