

DILUCO™ 100 PRODUCTS

Hill and Griffith **DILUCO™ 100** products are formulated with refined oils, natural and synthetic polymers, natural and synthetic waxes, vegetable oils, wetting agents and emulsifying agents for use as mold release agents. They are easily diluted with water and present no known fire hazard. **DILUCO™ 100** products may be compatible with solid particle lubricants and additive packages if conditions of use warrant their needs.

- Fast, Easy Release
- Excellent Thermal Stability
- Essentially Non Volatile
- Good Lubricity
- Provides Good Fill
- Easily Applied

Typical Product Data

| | | | |
|-----------------------|--|------|------|
| | 120 | 132 | 135 |
| Non Volatile Matter | 32% | 30% | 22% |
| Active Content | 24% | 25% | 18% |
| Graphite Content | 0.0% | 1.0% | 0.0% |
| Emulsifier Type | -----Anionic----- -----Nonionic----- | | |
| Color | -----Translucent to Pale Yellow----- | | |
| Dilution Stability | No Visible separation after one month at .55% solids in 342 ppm hard water. | | |
| Freeze/Thaw Stability | -----4 Cycles (min.)----- | | |
| Storage Stability | -----1 year ----- | | |
| Diluent | -----Water ----- | | |

Application

DILUCO™ 100 products are general-purpose mold release agents for aluminum and zinc metal parts that are to be painted, metallized, or bonded. Dilute with water to a working concentration of .55 to 2.2% solids (40 to 80:1). **DILUCO™ 100** products can be applied by any conventional method, although spraying is usually the preferred method.

Finishing Operations: It has been proven in service that this family of die lubricants does not interfere with paint adhesion therefore eliminating the need for any steps, other than normal cleaning procedures, before painting the part. These lubricants have also been used successfully to die cast parts, which are to be subsequently plated, anodized or chemically treated. Thorough cleaning of the part is requisite to obtaining good adhesion of the finish coating in any operation.

Bacteriostat/Fungistat Additive-Preservative: DILUCO™ 100 products contain Onyxide 200* as a preservative. Sufficient Onyxide 200 is present to preserve the emulsion product as shipped. Dilution of the emulsion with water may result in the need for additional bacteriostat/fungistat to counteract any increase in microbial activity. Each user should evaluate the diluted emulsion before putting it into use. Depending on the specific application and dilution level, it may be necessary to use additional bacteriostat/fungistat in the diluted product. *Trademark of Stepan Company

Storage Temperatures: In general, DILUCO™ 100 products are manufactured using components having low order of toxicity. Fluid or vapor in the eyes may cause transitory irritation that disappears within 24 hours. Flushing the eyes with flowing water will usually prevent discomfort. If irritation persists, consult a physician. Material Safety Data Sheets outlining the known hazards and safety precautions associated with the products are available and should be used accordingly.

Handling Suggestions: DILUCO™ 100 products have been designed to be efficient under most conditions. However, in order to optimize savings and increase molding efficiency, the following handling methods are recommended.

Hard Water Dilution: DILUCO™ 100 products are usually stable in hard water. However should the water supply be 342 ppm hardness or higher, softened or boiler condensate is recommended as a diluent.

Mixing With Other Materials: DILUCO™ 100 products are compatible with many other release agents and additives. Certain of these, however, will break the emulsion concentrate. Any mixture of DILUCO™ 100 products with other materials should be thoroughly checked before it is put into factory use.

Corrosion Inhibition: DILUCO™ 100 products contain a sodium benzoate corrosion inhibitor. Where sufficient sodium benzoate is available to prevent corrosion of the original shipping container (when applicable); it is not possible to add sufficient corrosion inhibitor to be effective at all dilution levels for all applications. Each user should evaluate the diluted products before putting them into production use. Depending on the specific application and dilution level, it may be necessary to add additional corrosion inhibitor to the diluted product.