

PRODUCT DATA

CINDOL® 4683

A UNIQUE METAL FORMING LUBRICANT WITH ND ADDITIVE FOR USE ON ALUMINUM AND OTHER METALS

Cindol 4683 was developed especially for use as a lubricant for drawing and forming aluminum. It can be used for difficult non-ferrous stamping and forming operations as well as for rod breakdown drawing of aluminum wire.

In addition to its remarkable lubricating characteristics, **Cindol 4683** contains a unique additive, ND. This dramatically lowers the coefficient of friction of steel to aluminum, aluminum to aluminum and can also be used on stainless steel, bronze, brass, galvanized steel, titanium and other metals.

When **Cindol 4683** is used for wire drawing, it has the following advantages over conventional lubricants: brighter wire, permits faster drawing speeds, dies run cooler and build-up on the die is reduced.

The protective film which remains on the wire keeps it bright and clean. There is no problem with adhesion of insulation coatings.

APPLICATION AND USAGE

Before **Cindol 4683** is charged into a system, machines should be thoroughly cleaned. In order to obtain optimum results from **Cindol 4683**, the system must be kept free of moisture. (MOISTURE INCREASES DIE WEAR AND GIVES A POOR SURFACE FINISH). Sump temperatures are regulated at 120°F \pm 10°F (49° \pm 5°C). At no time should the temperature be allowed to drop below 85°F (29.4°C) or exceed 150°F (66.0°C).

Houghton's **Cindol 4683** should be used neat as supplied.



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TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--------------------------|---------------|
| Viscosity @ 100°F (38°C) | 685 SUS |
| Appearance | Amber liquid |
| Odor | Bland |
| Flash Point (C.O.C.) | 350°F (177°C) |
| Fire Point (C.O.C.) | 410°F (210°C) |
| Pounds per Gallon | 7.49 |
| Specific Gravity | .90 |

SHELF LIFE

One (1) year

SHIPPING INFORMATION

Cindol 4683 is available in 55 (U.S.) gallon (208 liter) drums and in bulk.

SHIPPING CLASSIFICATION

Metal Drawing Compound

STORAGE/HANDLING DISPOSABILITY

No health or safety hazards exist when **Cindol 4683** is stored, used and disposed of in accordance with instructions given on the Material Safety Data Sheet for this product.

WARRANTY

The information given here is considered to be correct and is offered for your consideration, investigation and verification. No warranties are expressed or implied since the use of our products is beyond our control. Statements concerning the use of Houghton products are not to be construed as recommending the infringement of any patent.

EXPORT STATEMENT

This commodity and its technology are subject to the export control laws and regulations of the United States Government. Buyer agrees that it shall not make any disposition, by way of export, diversion, transshipment, re-export or otherwise, except as expressly permitted under United States law.

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