



DAPHNE MASTER DRAW™ 598

The MASTERDRAW™ product line is manufactured in Japan by Idemitsu Kosan Co., Ltd. under license from Etna Products, Inc., Chargin Falls, OH USA.

~Drawing oil for non-ferrous metals (fine wires ·fine pipes)~

1. Application

DAPHNE MASTER DRAW 598 is a drawing oil for cold drawing oil for copper, copper alloy, aluminum and aluminum alloy. It is used for finishing processing of fine wires and pipes.

It can also be used for cold drawing of ultra-fine stainless steel wire, forming of steel sheet plated with non-ferrous metal, mild drawing of nonferrous metal and punching of thick plate.

2. Quality

It is a relatively low viscosity drawing oil with highly refined mineral oil, synthetic polymer compounds and a large amount of oiliness improver.

We make this product in Japan based on a technical agreement with the well-known drawing oil maker in the United States, ETNA Products.

3. Characteristics

- (1) Excellent lubrication reduces wear of tools such as dies and plugs, and provides a good finished surface and gloss.
- (2) When subjected to bright annealing in an inert gas atmosphere, it exhibits excellent annealing characteristics and can skip the cleaning process before annealing.
- (3) Since it is inert to metals, it does not cause greening by copper and keeps the product surface clean for a long time.

4. Typical Specification

Test Items	Unit	
Density @15°C	g/cm ³	0.8839
Kinematic Viscosity @40°C	mm ² /s	19.98
Kinematic Viscosity @100°C	mm ² /s	5.891
Viscosity Index	—	273
Saponification Number	mgKOH/g	154
Flash Point (COC)	°C	180
Color (ASTM)	—	L0.5
Copper Strip Test (100°C×3hr)	—	1(1a)
Classification under the Fire Services Act		Class III petroleum

5. Attention

- (1) If skin irritation occurs due to your constitution, wash well with soapy water and apply a protective cream.
- (2) In cold weather, slight fogging and precipitates may occur, but it is not a problem for practical use.
- (3) Precipitation may occur during storage. In that case, shake well before using.

6. Packing

200 L drum, 20 L pail

- Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provide in the Safety Data Sheet (SDS) are followed.
- SDS is available upon request through your sales contract office, or via the internet.
<https://www.idss.co.jp/business/lube/>
- Due to continual product research and development, the information contained herein is subject to change without notification.

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