# TECHNICAL DATA SHEET

## FERROCOTE® 61 MAL HCL 1

MILL APPLIED LUBRICANT - AUTOMOTIVE APPROVED

FERROCOTE® 61 MAL HCL 1 is a flexing, blank washing, blanking, stamping, and drawing lubricant.

#### **Applications**

FERROCOTE® 61 MAL HCL 1 is a lubricant-rust preventive that is designed to be applied to sheet steel and/or blanks in any of the aforementioned operations.

#### Fluid Maintenance

This product is used as received. It should not be diluted with any type of solvent or oil. Dilution will significantly reduce its performance and quality. It can be applied by normal application methods. Concentration control is not an issue with this product because it is used as received. Please consult your Quaker Houghton representative for more information on proper fluid maintenance.

### **Cleaning and Protecting**

To clean and protect, after the drawing and stamping operation, use Quaker Houghton cleaners (QUAKER-CLEAN®) and corrosion preventives (FERROCOTE®) to enhance process compatibility. Consult your Quaker Houghton representative.

### Compatibility

To enhance process compatibility, use Quaker Houghton metalworking fluids and cleaners. Consult your Quaker Houghton representative.

## Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions. This product has a shelf life of 6 months, and it should be stored out of direct sunlight in temperatures between 40°F (4°C) and 110°F (43°C).

#### **Benefits**

- Can be applied by the typical application methods, including electrostatic
- · Used for coating coils at all mill speeds
- Can be stacked or coiled immediately after application
- Contains small quantities of emulsifiers for ease of removal in industrial cleaning lines

#### **Properties**

PROPERTY	TYPICAL VALUE	UNIT
PROPERTI		OIVII
Appearance	Translucent, Green Liquid	
Specific Gravity at 60°F	7.95	lbs/gal
Pour Point	<-18 / < 0	°C/°F
Flash Point via COC	204 / 400	°C/°F
Film Thickness	0.24	mils
Fire Point via COC	212 / 415	°C/°F
Viscosity at 100°F	210	SUS
Coverage per Gallon at 250mg/ft²	14,500	gal/ft²

PERFORMANCE TESTS	
JAN H-792 Humidity	15 - 20 days
Cabinet	1010 Cold Rolled Steel



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#### **Customers**

#### **CUSTOMERS**

- AK Steel
- American Lubricants
- Arcelor Mittal Steel
- Delaco-Kasle
- Double Eagle Steel Coatings
- Ford Motor
- General Motors
- Industrial Chemical Co.
- Kenwal Pickling
- Material Science Corp
- Nucor Steel
- Numit
- ProTec Coating Co.
- Regional Steel Distribution Co.
- Severstal NA
- · Spartanburg Steel Stamping
- ThyssenKrupp
- US Steel
- Wheeling-Nisshin
- Worthington Specialty Products

All reasonable care has been taken to ensure this publication is accurate upon issue. Such information may be affected by changes subsequent to issue. This Technical Data Sheet is to be used solely for this product. Prior to any use, consult the Safety Data Sheet (SDS) for information on hazard risks and product use parameters. All liability and all warranties express or implied are hereby excluded as to product performance results, the accuracy of these data including any warranty of merchantability or fitness for any purpose. 011527

