# Garia 405 M-22 & 405 M-32

**Neat Cutting Oils** 

### DESCRIPTION

Garia 405 M-22 & M-32 are neat cutting oils for general machining on automatic lathes, gear hobbing and on thread – or tooth-flank grinding machines. Garia 405 M-22 & M-32 are particularly for working on middle to high resistance alloyed and low carbon steels and aluminum or magnesium alloys.

### **FEATURES/ BENEFITS**

Garia 405 M-22 & M-32 are based on hydro treated mineral oils with a low aromatic content.

Combinations of polar, extreme pressure and anti wear additives provide the oils with high load carrying properties. The oils provide good tool life and good surface finish of the machined work pieces. High efficient anti mist additives reduce the mist load in the air.

Due to the active sulphur in the Garia 405 M-22 & M-32 there is a risk of staining of yellow metals.

Garia 405 M-22 & M-32 are free of chlorine and heavy metals.

- Enhanced lubricity provides extended tool life and reduces tooling cost.
- Provides improved part finish which reduces overall cost through reduced rework and scrap rates
- Allows grinding wheels to run clean with less loading which saves money by extending time between wheel dressing and wheel changes.

## DATA (TYPICAL VALUES)

| Garia 405  | M-22   | M-32   |
|--|--------|--------|
| Appearance   | Yellow | Yellow |
| Kinematic viscosity @ 40 °C mm²/s<br>(ASTM D 7042) | 22     | 32     |
| Density @ 20° C kg/m3<br>(DIN EN ISO 12185)        | 865    | 875    |
| Flash point COC °C<br>(DIN EN ISO 2592)            | 190    | 200    |
| Cu-Corrosion Test Alfa<br>(ASTM D 130)             | 4a     | 4a     |

#### **HEALTH AND SAFETY**

Refer to MSDS for proper handling and disposal. Please note that the MSDS includes handling, health and disposal information which should be passed on to your employees, and to anyone else who comes in contact with our product. Additional advice can also be obtained from your local Houghton representative.

NOTE: Read and understand all precautions on container labels before using this product.

Date I version Code



Houghton International Inc. Madison and Van Buren Aves. P. O. Box 930 Valley Forge, PA 19482-0930 Phone: 610-666-4000 Fax: 610-666-0174 info@houghtonintl.com www.houghtonintl.com

This document contains information based on data that is believed to be correct. However, the product may not be applicable to all uses and operating environments. No warranty or guarantee is expressed or implied.