

PERMASOL 60A

Soluble oil for metal removal applications

DESCRIPTION

PERMASOL 60A provides excellent cooling, lubricity, and rust protection for use in a wide range of grinding and machining operations on ferrous and non-ferrous metals.

PERMASOL 60A is general purpose soluble oil containing a high level of emulsifiers for superior performance. It readily emulsifies and forms very stable emulsions even with relatively hard water and high dilution ratios.

FEATURES

- Excellent cooling and lubricating
- Extended tool life
- Low foaming tendency
- Nitrite, silicone, and heavy metal free
- Easy emulsification - stable emulsions
- Good rust protection - machine and parts
- Easy removal from parts
- Lower disposal costs

TYPICAL VALUES

Product Appearance	Amber Fluid
Emulsion Appearance @5%	Milky White
pH @5 %v/v	9.0
Specific Gravity @15°C	0.920 kg/L
Brix Concentration Factor	1.0
Viscosity @20°C	45 cSt
Corrosion Breakpoint (IP 287)	30/1 Min
Thermal Stability 24 hrs @0°C	Stable
Thermal Stability 24 hrs @50°C	Stable

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.

September 2012 Version 1.03 Code: DROB



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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.

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REFERENCES

PERMASOL 60A is suitable for all removal and grinding operations as well on standalone machines and in central systems.

HOW TO USE

The concentration of **PERMASOL 60A** varies depending on the type of machining operation, the water hardness and the required inter-operational corrosion protection.

General machining : 4 – 6 %

Severe cutting operations : 5 – 8 %

Grinding : 3 – 5 %

This may be customised to suit individual needs or solutions, which may vary from time to time. Houghton strongly advises that you contact your Sales Representative to discuss before commencement of use.

SHELFLIFE & AVAILABILITY

Under normal conditions the recommended shelf life for **PERMASOL 60A** is a minimum of Twelve (12) months, unless otherwise specified. The product should be stored inside (5-40°C) for no more than 1 year and be protected from freezing.

PERMASOL 60A is available in Pail, Drum or Tote. Other sizes may be available upon request , please contact your Houghton sales representative.

RELATED PRODUCTS

- CUT-MAX®: Straight cutting oils
- GARIA™: Straight cutting oils
- MACRON™: Straight cutting and honing oils
- EXCELENE™: Straight cutting and honing oils
- DASCOLENE™: Straight OEM approved cutting oils
- HOCUT®: Water miscible metalworking fluids
- DASCOOL™: Water miscible metalworking fluids
- DROMUS™: Soluble metalworking fluids
- ADRANA™: Micro-emulsion metalworking fluids
- SITALA™: Semi-Synthetic metalworking fluids
- METALINA™: Synthetic metalworking fluids
- HOUGHTO-GRIND®: Straight and water miscible grinding fluids
- HOUGHTO-DRAW®: Straight and water miscible drawing stamping and forming fluids.
- CINDOL™: Straight and water miscible drawing and forming fluids especially for Aluminium parts.
- FENELLA™: Straight and water miscible drawing, stamping and forming fluids.
- CERFA-KLEEN®: Water miscible cleaning fluids
- VIBRA-KLEEN®: Water miscible vibrating cleaning fluids
- CALLINA™: Water miscible cleaning fluids
- RUST VETO®: Straight and water miscible rust preventive fluids.
- ENSIS™: Straight and water miscible rust preventive fluids.
- COSMOLINE®: MIL-SPEC Straight and water miscible rust preventive fluids.

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