



# Almag<sup>®</sup> Oil

Low Viscosity, Non-Active Cutting Oil

Product Data Sheet

## Customer benefits

### Excellent machining characteristics

Low viscosity provides faster wetting of metal surfaces and penetration to the cutting zone. Oil also drains more rapidly from machining swarf. Superior cooling properties enable efficient heat transfer, which prevents loss of tool hardness and distortional inaccuracies of the workpiece. Light colored appearance permits a clear view of the tool and workpiece.

### Non-staining to workpieces

As the highly refined base oil contains no active additives which may react with metal surfaces, this product is non-staining to both ferrous and non-ferrous metals. Superior cooling properties minimize overheating and “blueing” of parts and chips.

### Long tool life

Highly refined base oil provides good lubricity at the chip-tool interface to reduce frictional heat and tool wear.

### Safe to use with magnesium

Excellent cooling properties eliminate the need to use a water-reducible metalworking fluid to remove heat in machining operations. It contains no water to react with magnesium to form heat and explosive hydrogen.

## Applications

Almag<sup>®</sup> Oil is recommended for:

- Machining and grinding aluminium, magnesium and their alloys.
- Particularly suited for the machining of magnesium, where the use of a water-reducible metalworking fluid could be hazardous.
- Grinding of other high machinability rating ferrous and non-ferrous metals when an EP product is not required.
- Honing operations.
- Grinding of glass.

## Product features:

- Almag<sup>®</sup> Oil is a transparent, light colored, low viscosity, straight mineral cutting oil designed particularly for use in grinding and light-duty machining operations on aluminium, magnesium and their alloys.



## Product specifications

ALMAG® OIL	
KEY PROPERTIES	
Product code	530600
Flash point COC, °C	146
Viscosity, mm <sup>2</sup> /s @40°C	9.5

0806

## Service considerations

The service life of any cutting oil is dependent on many variables such as machining operations and conditions (i.e., feed rates/speed, temperature/pressures, etc.), oil flow rates, contamination, the catalytic effect of metal fines or chips in the oil, and plant reclamation practices.

Obviously, external contamination of the cutting oil with water and other oils and fluids should be avoided. However, if external contamination does occur, it should be rectified immediately.

Almag Oil may be reclaimed using conventional reclamation techniques. Solid particulates may be removed by chip wringers, centrifuges, hydrocyclones, magnetic separators, filtration and other techniques. Water and other liquid contaminants may be removed by settling, air stripping, vacuum dehydration or other means.

## ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide.

Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal.

To obtain a MSDS for this product, visit:  
[www.caltexoils.com](http://www.caltexoils.com).