

Shell GARIA® Alum-Mag Oils

Low Viscosity, inactive cutting oils designed especially for aluminum and magnesium

Shell GARIA® Alum-Mag and Shell GARIA® Alum-Mag Special are low viscosity, non-active cutting oils designed for use in light duty machining and grinding operations on ferrous and non-ferrous metals, particularly aluminum, magnesium and their alloys. Shell GARIA® Alum-Mag and Shell GARIA® Alum-Mag Special are transparent, light colored cutting oils that have been formulated using high quality refined base stocks. Shell GARIA® Alum-Mag is a straight mineral oil. Shell GARIA® Alum-Mag Special contains fatty oil which provides enhanced lubricity and improved surface finish. Both products have low viscosities which provide faster wetting of metal surfaces and penetration to the cutting zone. The products exhibit good cooling properties and oxidation stability.

Performance Features and Benefits

- Excellent cooling properties
- Outstanding oxidation stability
- Non-staining to both ferrous and non-ferrous metals
- Helps improve surface finish on machined parts
- Excellent filterability
- High dielectric properties

Main Applications

- Light duty machining and grinding of magnesium, aluminum and their alloys. It is also suited for grinding of other high machinability rating ferrous and non-ferrous metals when an extreme pressure product is not required.
- Glass grinding
- Honing

Typical Physical Properties

Shell GARIA®	Test Method	Alum - Mag	Alum - Mag Special
Appearance		Pale	Dark Pale
Odor		Mild	Mild
Gravity, °API @ 60 °F	D 1298	30.0	29.8
Viscosity, cSt @ 40 °C	D 445	9.5	10.8
Flash Point, COC, °F	D 92	295	310
Pour Point, °F	D 97	-40	-15
Fatty Oil		None	Present

These characteristics are typical of current production. While future production will conform to Shell specifications, variation in these characteristics may occur.

Advice on applications not covered in this handbook may be obtained from your Shell representative.

Handling and Safety Information

For information on the safe handling, storage, or use of this product, refer to its Material Safety Data Sheet at <http://www.epc.shell.com/>. If you are a Shell Distributor, please call 1+800-332-6457 for all of your service needs. All other customers please call 1+800-237-8645 for all of your service needs.

Protect the Environment

Do not discharge into drains, soil, or water.