



## CHARACTERISTICS

Usable for:

- Non-alloy steel
- Low alloy steel
- Special carbon steel
- Brass
- Aluminium
- Copper

## IDEAL FOR

- mechanical machining and grinding
- medium harsh generic cutting operations

## APPLICATIONS

- Plastic deformation
- Milling
- Lathe turning
- Threading
- Boring
- Cutting
- Deep drawing
- Blanking

## MAXTREME OIL

This is a whole oil with marked characteristics aimed at the ecological aspects, formulated with bases of natural origin.

Formulated for applications with minimum quantity lubrication systems, it can be used in medium harsh generic cutting operations.

The innovative characteristics of the fluid make it ideal for the generation of air-oil mixture micro particles for internal and external tool operations.

Its composition contributes to protecting the work environment, reducing waste water and lowering consumption.

It is made up of a synthetic-based ester in a compound with greasing, anti-oxidant and metallic passivating agents which, applying a strong synergistic action together, guarantee:

- absence of smoke and vapours in machining;
- a high flammability point for operations in complete safety;
- excellent fluidity even at low temperature and an exceptional wetting power, therefore the oil spreads over the metallic surface quickly and evenly;
- outstanding greasing and lubro-releasing powers for quality finishes;
- good resistance to oxidation and rust;
- good anti-wear powers;
- a high heat removal efficiency with reduced temperatures of the machined pieces.

The product is free of chlorinated derivatives.



Ordering information	
3226692	MaXtreme - Oil 22 Litres
3226693	MaXtreme - Oil 206 Litres
3226694	MaXtreme - Oil 980 Litres

Physical and chemical properties	
Initial boiling point and boiling range (°C)	100
Flash point (°C)	>250
Relative density(g/cm <sup>3</sup> )	0.918
at (°C)	15
Viscosity (mm <sup>2</sup> /s)	45 – 50
at (°C)	40
Pour point (°C)	<-6



## MINIMUM QUANTITY LUBRICATION

The purpose of dry machining is to replace the traditional coolant or whole oil system in a work environment with a compressed air flow, generating an ultra thin film of "aerosol" mixture that goes through the spindle and the coolant channels of the utensil and reaches the cutting point directly.

This guarantees high performance linear lubrication in the machining.

## Minimum quantity lubrication systems (MQL) and Dry machining

The lubrication system can be used in two ways:

**External Lubrication:** the air-oil mixture arrives on the surface through a nozzle.

**Internal lubrication or "through the utensil":** the air-oil mixture, particles smaller than a micron, passes through the spindle and the coolant channels of the utensil and is taken directly onto the cutting area.

DropsA has developed a revolutionary technology for both processes: MaXtreme (internal or through-utensil lubrication) and MiQuel (lubrication external to the utensil).

## Benefits of MQL



### Cleaner/safer work environment

- Cleaner/safer work environment
- No mist in the air
- No coolant on the floor
- Coolant management
- No coolant disposal cost
- No separation of the coolant from the swarf
- No need for coolant filtering systems



### Improved system processes

- Reduces down time
- Increases production
- The parts can be seen in the creation phase



### Longer utensil life



### Improved finished product/quality



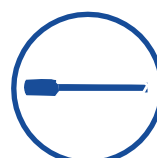
Boring



Milling



Lathe turning



Single-tip Drill



Step milling



Many other applications

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DropsA products can be purchased at DropsA branches and authorised distributors. Go to [www.dropsa.com/contact](http://www.dropsa.com/contact) or write to [sales@dropsa.com](mailto:sales@dropsa.com)

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