

Blaser Swissslube cutting oil

Blaser Swissslube AG is a company specialized to produce various types of cutting oils used in different mechanical operation, like: turning, milling, reaming, threading, hobbing , shaving and so so.

The different types of oils produced with a modern technology are able to increase the life of tools and to reduce the production cost.

The modern cutting oil of Blaser Swissslube are “*ester oil based*”, therefore are more biodegradable as a mineral oil.

The following data show the main characteristic of two important cutting oil, especially suggested for gear production.

We show also some application chart obtained by testing the products with important industry.

The following oil Vascomill CSF35 is suggested for cutting operations.

Vascomill CSF 35

Characteristic	Cutting fluid based on ester oil for flooded applications and for minimal quantity lubrication
Applications	<i>Operation: milling, turning, reaming, threading, hobbing, shaving, shaping , sawing, punching.</i> <i>Materials: steel alloys, stainless steel, titanium, titanium alloys, aluminium, aluminium alloys, cast iron and non-ferrous metal</i>
Physical-chemical data	
Viscosity at 40 °C	35 mm ² /s
Density at 20 °C	0,90 g/cm ³
Flash point	333 °C
Ester content	> 90 %
Mineral oil content	0 %
Zinc content	0 %
Chlorine content	0 %
Sulphur content	0 %
Copper corrosivity	1a (3h a 60 °C)
Colour	yellow

Benefits

- *Cleaner workplace*
- *Good surface quality*
- *Higher tool life*
- *Renewable raw materials, good skin compatibility, more readily biodegradable as a mineral oil*

Safety and environmental aspects

EC waste code: 12 01 10

ADR-class: none

Water endangering class WEC: not water endangering

For more detailed information please consult the EC Safety Data Sheet.

Gear tooth cutting

- Machine: CIMA 1600
- Gear hobbing cutter: solid hob, special steel, diam. 120 - 1 start –
- TiAlN coating Alcrona
- Module: 4,5
- Tank: 800 Lt
- Used product: Shell Garia 3
- Produced pieces: 3000

- Results with Vascomill CSF 35
- Produced pieces: 4200 (+40%)
- No smoke
- Bright chips
- No odour

The following oil Blasogrind HC 10 RZ is suggested for grinding operations.

Blasogrind HC 10 RZ

Characteristic	Chlorine free grinding and honing oil based on synthetic oil (hydrocrack-oil). Blasogrind HC 10 RZ was especially developed for high demanding grinding operations
Applications	<i>Operation</i> toothed roller grinding, tooth profile grinding, profile grinding, deep grinding and honing. Also suited for light chip removal operations. <i>Materials</i> : case hardening, tempering steel and high speed steel (HSS).
Physical-chemical data	
Viscosity at 40 °C	10 mm ² /s
Density at 20 °C	0,85 g/cm ³
Flash point	170 °C
Ester content	7 %
Zinc content	0 %
Chlorine content	0 %
Sulphur content (total)	2,2 %
Copper corrosivity	1a (3h a 60 °C)
Colour	yellow

Safety and environmental aspects

- EC waste code: 12 01 10
- ADR-class: none
- Water endangering class: WEC 1
- For more detailed information please consult the EC Safety Data Sheet.

Product properties	Benefits
Highly additivated	Higher lubricating properties Longer grinding wheel life
Good wetting	Better surface quality
Oxidation stable	Very high ageing stability Long durability of the grinding oil

Shaping operation

- *Machine: LIEBHERR LFS 700*
- *Annotation: They work 3 rings simultaneously total stroke length 144 mm*
- *Module: 6*
- *Shaper Cutter: TiN coated*
- *Tank: 800 Lt*

- *Results with Vascomill CS*
- *The have made 18 pcs with the shaper cutter*
- *Approximately + 30% than the competitor product*
- *(Valvoline Promax 1122)*
- *No smoke*
- *Reduction of the consumption*

(Source of the data : Blaser Swissslube)