TECHNICAL DATA SHEET



FLUID FREE OF BORON, SECONDARY AMINE, AND FORMALDEHYDE PRECURSOR



APPLICATIONS

LUBRIFIANTS

STARCUT LH 29 is a micro-emulsion with high lubricity recommended for the machining and grinding of difficult materials.

STARCUT LH 29 is formulated from high-performance lubricating agents and highly refined mineral oils to ensure a high level of lubrication.

STARCUT LH 29 has a high level of detergency which improves the visibility of parts, keeps machines clean and results in lower consumption even in the case of machining cast iron.

Thanks to its low alkalinity, STARCUT LH 29 is perfectly adapted to machining aluminium alloys.

STARCUT LH 29 is suitable for centralised systems as well as for machines with high flow rates and high pressures.

STARCUT LH 29 is compatible for freshwater with moderate hardness.

BENEFITS

- **Low foaming**: ideal for high pressures and flow rates in moderately hard freshwater
- > High anti-corrosion protection: lower emissions and less maintenance of machines
- Improved lifespan: special technology increasing the lifespan of baths
- Stability of the emulsion: fewer additive treatments and lower cost per use
- High detergent power: keeps parts and machines clean
- > Meets the **PMUC** criteria within the concentration limit < 12%.
- > Boron-free: not classified as SVHC under REACH regulations.
- Very good HSE profile: free of boron, chlorine, formaldehyde-releasers and phenol. Contains only TRGS611-approved amines

USE

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Y N V The percentage of use is to be taken into account according to the materials to be machined, the hardness of the water and the protection of the machined metals required.

- Grinding: 4 6%
- Normal machining: 5 8%

CHARACTERISTICS

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
Appearance of the concentrate	-	Visual	Light amber
Density at 20°C	kg/m ³	ASTM D 1298	995
Refractive Index	-	HIM 53	1.5
Appearance of the emulsion	-	Visual	Opalescent
pH in use	-	DIN 51396	9.6 - 9.8

The typical characteristics provided are only approximate values

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HEALTH, SAFETY AND ENVIRONMENT

The selection carried out on the raw materials and the health tests that **STARCUT LH 29** is subjected to ensure that this product, when used properly according to the recommendations, is perfectly harmless to users. It is worth noting that a coolant operates in a sump for a relatively long period of time, during which it is subjected to various types of pollution that can be of a chemical nature (hydraulic oils, fats, metallic solutions, varnishes, passivators, etc.) or bacteriological (users' hands, parts to be machined, industrial waste water, fire clay, miscellaneous waste, etc.) Good hygiene in the workplace can extend the duration of the bath and optimise the chemical characteristics of the product.

Disposal must comply with applicable regulations pertaining to the disposal of used oils.

The products must be stored in a covered area that is clean and dry, and not exposed to cold temperatures. The recommended storage temperature ranges from 5°C to 40°C unless indicated otherwise. Ensure that there is a good stock turnover rate.

Use-by date: manufacturing date +12 months.

Our technical department is available to provide advice if needed.

www.unil-opal.com