



## **HAROLBIO 2**

## **Description:**

It's a whole cooling lubricant, free from mineral oil, formulated for chip removal operations of ferrous and non-ferrous metals.

It's formulated with state of the art raw materials, consisting of natural synthetic esters refined with a unique method and mixed with antioxidant and antirust additives and metallic passivators.

- Features:
  - no formation of smoke and vapours during the process;
  - a high flashpoint for operations in complete safety;
  - an excellent smoothness even at low temperatures and an exceptional wetting power, for which the oil disperses quickly and uniformly on the metallic surface;
  - excellent greasing power, EP and detaching cutting power, for high quality finishes;
  - good resistance to oxidation and rust;
  - good anti-wear power;
  - low temperature of the processed pieces;
  - well crushed and shredded scrap;
  - complete biodegradability;
  - maximum tolerance by the operators because it does not contain any harmful and irritant components.

The product is free from chlorinated and/or sulphorated compounds and it doesn't contain aromatic polycyclic hydrocarbons (IPA).

Application:

All the removal and cutting operations, also the heavy ones, with both traditional jet lubrication systems and minimal spray lubrication systems, on ferrous and non-ferrous materials, titanium included.

Warnings:

The product is not suitable for yellow metals machining. If required, please contact our Technical Sales Office.

## **AVERAGE CHEMICAL AND PHYSICAL PROPERTIES\***

ASTM D 1298	Kg/lt	0,888
ASTM D 445	cSt	21
ASTM D 445	cSt	5,4
ASTM D 2270	-	209
ASTM D 92	°C	224
ASTM D 92	°C	258
Visual	°C	-10
DIN 51347	N/mm <sup>2</sup>	23
	ASTM D 445 ASTM D 445 ASTM D 2270 ASTM D 92 ASTM D 92 Visual	ASTM D 445

\*Data do not constitute any specification

Issue date: 24/02/2016