

## STAR METAL – CUT 320

mineral oil-free, water-soluble metalworking coolant concentrate

**STAR METAL – CUT 320** is a water-soluble metalworking coolant concentrate for chip-forming as well as chipless machining of cast iron, alloy and plain carbon steel.

### Product profile:

- free from boric acid, amin containing coolant concentrate
- free from formaldehyde donors

### Product properties / advantages:

- improved tool life due to well-balanced additives
- good technical stability
- good load carrying capacity
- good filtration properties
- produces stable solution in make-up water from 0 °dH to 20 °dH; solution in use is stable up to 40°dH
- very good air release property
- good corrosion protection

### Technical data:

Concentrate		Solution		
Kin. viscosity at 20 °C [mm <sup>2</sup> /s]	Mineral oil [%]	pH at 5 %	Corrosion protection DIN 51360/2	Refractometer factor [%/°Brix]
ca. 70	0	9.5	4 % - note 0 (no staining)	1.4

### Application:

chip-forming and chipless operations

### Remarks:

Correct preparation of a fresh solution is ensured by slowly pouring the concentrate into water while stirring continuously. Alternatively, an automatic mixing device may be used.

The recommended concentration depends on the application and the materials to be machined:

chip-forming and chipless machining: 5 % - 12 %, according to application and water hardness

The concentration of the in-use solution may be checked using a refractometer. The refractometer reading must be multiplied by the refractometer factor to arrive at the concentration.

Please contact our technical support, if you would like to use the product at higher water hardness as mentioned above.

### Shelf life / storage conditions:

stable for 12 months when stored at a temperature of 5 °C to 40 °C in unopened containers

### Comments:

Minor variations in color and appearance are possible due to the raw materials chosen. However, these have no influences on the functionality of the product.

All information on safe and proper handling can be found on the MSDS.

For further product information please contact our sales representative or technical support.