



# PRODUKT KM 1512

Oxidation inhibitor for aqueous preparation of hard metals

## Chemical basis

Preparation of amines in aqueous solution

## Characteristics

<b>Appearance</b>	clear-turbid, colourless liquid
<b>Solubility in water</b>	unrestrictedly soluble
<b>Density</b>	approx. 1.05 g/cm <sup>3</sup>
<b>Water content</b>	approx. 88 %

## Shelf-life / Packaging

12 months under proper conditions | drums of 30 and 120 kg, containers of 1000 kg

## Application

PRODUKT KM 1512 reduces the oxygen absorption of hard metal and hence permits the preparation in water as suspension medium. Through the use of PRODUKT KM 1512, the milling time can be significantly reduced - even though having the same effect - as when milling with organic solvents. When using an attritor, milling time is approximately 1.5 - 3 hours, compared to 7 - 10 hours when using ball mills. The application quantity ranges approximately between 2.5 and 5.0 %, relative to the hard metal powder.

PRODUKT KM 1512 can be debinded at temperatures between 200 to 450 °C, and is nearly completely extracted from the hard metal.

## Typical addition quantities

100.0 kg	hard metal powder (WC + Co)
2.5 kg	PRODUKT KM 1512
20.0 kg	distilled water

## Application

2.5 kg PRODUKT KM 1512 are introduced into 20 kg water. Then, the binder is added (e. g. PRODUKT KM 4026). Afterwards, the hard metal powder is stirred into this mix, and the milling process is started. The resulting slurry can be dried immediately.

