

# TECHNICAL DATA SHEET

## COPPERSHIELD 5602

### WATER SOLUBLE ROLLING COOLANT FOR COPPER BARS

COPPERSHIELD 5602 is a full synthetic rolling compound free from mineral oil. It forms a translucent solution when mixed with water. COPPERSHIELD 5602 meets today's requirements for coolants (TRGS 611). The lifetime of the rolls and the coolant depends on good filtration and close control of the recommended concentrations.

Our Technical Service Department will answer all relevant questions to help to improve efficiency of your production.

An EC Material Data Sheet is available on this product.

\* the concentration is determined with the Satorius evaporation balance:

$(\text{Residue/Product weighed in quantity}) \times 100 \times F = \%$

Rolling fluids are complemented by our full range of high quality, speciality production fluids including energy saving wash chemicals, low misting neat cutting oils, non-VOC rust preventives, long life heat treatment fluids and highly approved fire resistants.

### Applications

COPPERSHIELD 5602 is used to lubricate and cool the rolls of roughing and finishing mills in the continuous casting process of copper bars (Southwire and Contirod).

### Recommendation For Use

Concentrations of use:

Roughing mills 0.5 - 1.0 %

Finishing mills 1.0 - 2.0 %

We recommend a bath temperature between 38 and 45°C.

### Benefits

- Good lubrication
- Good corrosion protection
- Good resistance against microorganisms
- Free from diethanolamine
- No foam above 40°C
- Good filtration characteristics
- Good washing properties

### Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions.

### Typical Physical Properties

PROPERTY	TYPICAL VALUE
Product Density @ 20°C:	1.06 g/cm <sup>3</sup>
pH 1% solution:	ca. 9.5
Viscosity @ 40°C:	9.5 mm/cm <sup>2</sup>
Concentration Roughing:	1.5 - 2.5%
Concentration Finishing:	1.5 - 2.5%
Water Hardness:	<5°dh

All reasonable care has been taken to ensure this publication is accurate upon issue. Such information may be affected by changes subsequent to issue. This Technical Data Sheet is to be used solely for this product. Prior to any use, consult the Safety Data Sheet (SDS) for information on hazard risks and product use parameters. All liability and all warranties express or implied are hereby excluded as to product performance results, the accuracy of these data including any warranty of merchantability or fitness for any purpose.

