

# SurTec® 320 S

## Stabilizer for Tin Colouring Baths

### Properties

- acidic liquid
- cresol- and benzene-free stabilizer for colouring baths based on tin sulfate
- prevents the formation of insoluble tin(IV) compounds resulting from the colouring process and by air oxidation
- exceptional throwing power
- increased colouring speed

### Application

*For immersion application:*

make-up values:

SurTec 320 S	25 g/l
SurTec 320 A	100-120 g/l
sulphuric acid	18-22 g/l

application time: 0.5-15 min (depending on colour)

temperature: 22 °C (20-24 °C)

tank material: polypropylene (PP), glass fibre reinforced plastic (GRP) or gummed steel tanks

heating: required

cooling: required

exhaust: recommended for worker's protection

filtration: recommended, 10 µm, filtration performance: 0.1-0.5 times of the bath volume per hour

### Technical Specification

(at 20 °C)	Appearance	Density (g/ml)	pH-value
SurTec 320 S	liquid, claret-red to violet, turbid	1.15 (1.13-1.17)	< 1

### Maintenance and Analysis

Dose SurTec 320 S in the ratio 1:1 to a maximum of 3:1 for the tin sulfate solution.

### Ingredients

- iron salt
- organic acid

## Consumption and Stock Keeping

The consumption depends heavily on the drag-out. To determine the exact amounts of drag-out, see [SurTec Technical Letter 11](#).

The following values can be taken as estimated average consumption:

SurTec 320 S                      3-12 g per m<sup>2</sup>

In order to prevent delays in the production process, per 1,000 l bath, the following amount should be kept in stock:

SurTec 320 S                      50 kg

## Product Safety and Ecology

The safety instructions and the instructions for environmental protection have to be followed in order to avoid hazards for human and environment. The Material Safety Data Sheets (according to European legislation) contain detailed information.

The following hazard designations and classifications into water hazard classes (WHC) have to be taken into account:

<u>product</u>	<u>hazard designation</u>	<u>water hazard class</u>
SurTec 320 S	C - Corrosive	WHC 1

## Warranty

We are responsible for our products in the context of the valid legal regulations. The warranty exclusively accesses for the delivered state of a product. Warranties and claims for damages after the subsequent treatment of our products do not exist. For details please consider our [general terms and conditions](#).

## Further Information and Contact

In our forum, you can discuss topics of the surface technology:  
<http://forum.SurTec.com/>

If you have any questions concerning the process, please contact your local technical department: <http://SurTec.com/International.html>

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