



TECHNICAL DATA SHEET

# CUPROGEN 12 R/T

*Degassing tablets for Aluminium-Bronze and Bronze alloys*



## DESCRIPTION

Cuprogen 12 R/T tablets release Nitrogen, useful when metal must be washed and degassed to remove oxides and impurities. Nitrogen gas has a very positive effect for the removal of hydrogen entrapped by the metal during melting operations and for bringing to bath surface all oxides, micro-oxides and impurities. These oxides, suspended in the liquid bath are generally surrounded by hydrogen gas and only the removal of oxides will contribute also to hydrogen total removal. Cuprogen 12 R/T tablets have a combined effect of physical and chemical nature. The tablet, dissolved by metal temperature, releases nitrogen gas capable to remove hydrogen dissolved in the metal and all non-metallic impurities floating inside the bath. The chemical action is achieved by chemical compounds contained in the product capable to react with oxides and to clean metal from non-metallic impurities. Cuprogen 12 R/T is recommended for degassing treatments of Bronze and Aluminium Bronze alloys in crucible furnaces and in pouring ladles.

## PRODUCT PHYSICAL DATA

<b>Appearance:</b>	Tablets	<b>Colour:</b>	Grey
<b>Specific gravity:</b>	1,7-1,9 g/cm <sup>3</sup>	<b>Metal temperature range:</b>	880-1040°C

## METHOD OF USE

Cuprogen 12 R/T tablets should be preheated near a heat source (for example on the top ring of the furnace) to remove possible traces of moisture of the product and to avoid introducing traces of humidity in the metal. The preheated tablets should be plunged into the metal after removal of all drosses covering bath surface. This is necessary to avoid entrapping them during nitrogen bubbling. The perforated bell type plunger, to be used for plunging the tablets, must be perfectly dry and protected with Metalcote 221. The plunger should have rows of holes (10-12 mm diameter) in order to enable free flow from the bell of the gas generated by tablets with good distribution inside the metal bath. At the end of tablets reaction, remove the plunger from the bath and, with the help of a slagging flux, remove all traces of drosses. Leave the metal resting for 10 minutes and start pouring or casting.

## QUANTITY OF USE

The quantity recommended is 200 - 400 g for 400 kg of metal.

## PACKAGING AND STORAGE

200 gr tablets in 25 kg boxes.  
Warning: The product is hygroscopic.  
Store in a dry storage and away from heat sources.  
Close the package after each use.  
If stored properly the product has a shelf life exceeding 12 months.