

## ISONIK® F-AC

Fixing agent for acid dyes on PA fiber

Composition	Hydroxyphenylsulfone
Appearance	Clear amber to reddish
Density 20°C	1.17 g/cm <sup>3</sup>
Ionic nature	Anionic
pH on solution 10 g/l	7.0
Appearance of aqueous solutions	Clear
Stability on hard water	Max. 10°dH
Stability to electrolytes	Also excellent with 20 g/l of Sodium Chloride or Sodium Sulphate
pH range stability	Excellent from pH 2 to pH 12
Wetting effect	None
Foaming	Minimum
Compatibility	Compatible with anionic and non-ionic product and dyes. Incompatible with cationic ones.
Storage stability	Excellent in normal environment conditions for 12 months. Avoid frost and scorching heat.

### Product description

ISONIK F-AC is a synthetic tannin designed to improve the wet fastness of acid and metal complex dyes applied on polyamide fiber and in blends with elastane.

- Excellent stability to acids in concentrated form.
- Compatible with levelling agents.
- Retardant / levelling agent in the dyeing of articles in PA or PA / elastane
- Improvement of wet fastness.
- Little or no effect on shades.
- Little or no effect on light fastness.
- Retardant in the dyeing of PA / wool blends.
- Reserving agent in the dyeing of PA / cotton and wool / cotton blends.
- Low viscosity.
- Easily soluble in water.
- Suitable for automatically dosing system.
- Excellent stability to concentrated acids.
- Can be used in the printing of PA mats to obtain different color effects.
- Applicable in the same dye bath, reserving in PA/cotton and wool / cotton dyeing.

## Instructions

### Solutions preparation

ISONIK F-AC dissolves quickly in water in any proportion.

### Dosages

#### 1) Fixation of acid dyes (dyeing)

The application carried out in a new bath involves correcting the pH of the bath on values of 4 - 4.5 with the help of acetic or formic acid.

The quantity depends on the intensity of the colors, the nature of the dyes used and the substrate: generally, 3 - 6% (o.g.w.) of ISONIK F-AC should be sufficient.

Start cold and bring the bath temperature to 80 - 90 ° C if you work on PA 6.6 or at 70 ° C for PA 6.

It is circulated for 30 ' ; the discharge, rinsing and softening follow.

The application of ISONIK F-AC can possibly also be carried out in the same dyeing bath at the end of the process, cooling the bath to 80 ° C before the introduction of the fixator.

#### Fixation of acid dyes (printing)

Best efficiency of ISONIK F-AC is set at 70-90° C, but these temperatures are not applicable to printed goods (causing backstaining).

In this case, accordingly to physical characteristics of the fibers, the fixation process should be run between 45° C and 60° C.

#### 2) Cotton / PA and cotton / wool dyeing

ISONIK F-AC acts as a staining inhibitor of PA and protein fibers on direct dyes in the one- or two-phase dyeing in a single bath.

Generally, it is used from 1 to 3%, on the weight of the goods.

Pay attention that the presence of non-ionic levelling agents can generate precipitations.

#### 3) Wool / PA dyeing

The use of ISONIK F-AC in the dyeing of wool / PA blends allows to reserve partially the rise of the acid dyes on the PA fiber, thus obtaining on- tone dyeing.

The quantities of use can vary from 2 to 5% (o.g.w.) according to the intensity of yield (larger amounts for light shades).

#### 4) Discharge

In order to over-dye or withdraw ISONIK F-AC from the PA fiber, alkaline environment is usually necessary, by addition of 1 - 3 cc / l Ammonia for 20 ' at 80 ° C; followed by rinsing.

#### DISCLAIMER

The information included in this document are based on the actual experience and knowledge and they are not intended to be exhaustive. This product is for professional use only. Any product usage other than those specifically recommended with no further confirmation by Isocarbo is at one's own risk. Isocarbo guarantees that all given instructions about ISONIK F-AC are correct. Isocarbo has no control over either the quality or the conditions of the substrate or factors that may affect ISONIK F-AC performance. Isocarbo Srl strongly recommends that extensive preliminary tests are performed, in order to evaluate any unexpected product behavior. Unless otherwise approved in writing, Isocarbo shall not be liable for any different performance, loss or damage due to unaccepted use of ISONIK F-AC. Isocarbo ensures its commitment to ongoing product development and improvement; hence the content of this technical sheet is susceptible to changes.