

UVAPOL RAY

UV absorber for best fastness to light on PES by exhaust process



UVAPOL RAY

Heterocyclic compounds and combinations of anionic and non-ionic dispersing agents

Properties

- UV asorber to improve the light fastness of PES dyeings in the automotive and outdoor fields
- Can be applied in the acid and alkaline dyeing processes for PES
- Stands out by a very good stability in the dyeing bath

Application Technique

UVAPOL RAY is stirred up prior to being added to the treatment baths.

Application Fields

UVAPOL RAY can be applied on all dyeing apparatuses and machines usually used in practice for dyeing polyester in the exhaust process.

With dark shades which cause major problems with oligomers on beam dyeings SARABID OPTI can be added to the recipe as booster without influencing the resulting shade.

SARABID OPTI prevents oligomers from crystallising and precipitating and excellently disperses UV absorbers.

Recommendation for use

The application amounts of UVAPOL RAY in the dyebath with a liquor ratio of 1 : 10 are generally as follows:

1.5 - 2.5 % UVAPOL RAY

The stirred up product is added to the dyebath having a temperature of 50 - 60 °C after the other chemicals and auxiliaries.

At the end the dispersion dyes are added.

Then, heat up to 80 - 90 °C. After having achieved this temperature heat up to a dyeing temperature of 130 °C.

The dyeing time depends on the colour depth and is

20 - 30 min in case of pale dyeings

30 - 45 min in case of medium and dark dyeings

Complete as usual.

UVAPOL RAY

Hot light fastness with DIN EN ISO 105-B06

<u>Dyeing:</u> Reductive cleaning:

Material:PES knitwearRecipe:5.0ml/lNaOH 38 °Bé4.0g/lHydrosulphite

Machine: Labomat®

LR: 1:10 20 min at 80 °C, cool down, rinse

Recipe: 0.1295 % Automotiv Yellow 155%

0.0612 % Automotiv Red 105 % 0.1362 % Automotiv Blue 198 %

3.0 % UVAPOL RAY2.0 g/I NEUTRACID BO 45

30 min at 135 °C, cool down, rinse

3 Cycles

Samples	Evaluation according to grey scale
A) without auxiliary	4
1.5 - 3.0 % UVAPOL RAY	4-5

5 Cycles

Samples	Evaluation according to grey scale
A) without auxiliary	4
1.5 - 3.0 % UVAPOL RAY	4-5



Test of dispersion stability when dyeing on apparatus by means of HPX test

Measuring the increase of pressure of a PES dyeing with material

Temperature curve from 50 °C - 130 °C during 60 min

Apparatus: Colorstar®/ Mathis



