LEVEROL ES

Fields of application:	**Leveling agent for dyeing of PA fibres and the coverage of physical irregularities like barred**
Composition:	Aryl sulphonate, fatty amine polyglycol ether
Appearance:	Redish brown, clear-slightly opalescent, liquid
Ionic state:	Anion-active
pH-value (10 % solution):	Approx. 10
Density (20 °C):	Approx. 1.1 g/cm³
Viscosity (20 °C):	Approx. 450 mPa.s
Solubility:	In cold water
Stabilities:	Goods resistance to acid, alkali and hard water
Storage stability:	Approx. 12 months after delivery
Storage conditions:	Recommended storage temperature: + 3 °C to + 35 °C Product clouds below -5°C Before use or sampling, stir well
Packing:	Polyethylene drum

Properties:

LEVEROL ES has high levelling power and good dye yield. It gives excellent levelling of differences in affinity and guarantees a rational and safe working process.

LEVEROL ES is low-foaming and prevents floating of the goods.

Application:
LEVEROL ES is used for dyeing PA fibre, especially with acid, disperse and sulphonated 1:2 metal complex and direct dyes. It can be applied on filament, staple and texturized fibres.

LEVEROL ES can be used according to the exhaust method on loose stock, yarn, fabric and knit wear.

Application quantities:
Amounts depend on tendency of goods to barrines, on the selection of dyes and partially on the depth of shade. We recommend

1.0 – 3.0 % LEVEROL ES

Working method:
Add to warm bath (Approx. 40 °C)

1.0 – 3.0 %	ammonium sulphate or
0.5 – 1.5 %	acetic acid 60% and
1.0 – 3.0 %	LEVEROL ES

The goods are pretreated for approx. 5 – 20 min., dyes are added subsequently. The dyebath is heated to the boil or to 120 °C within 20 – 40 min., dyeing is effected in a further 45 – 60 min. At dyeing temperatures exceeding 100 °C the migration effect of LEVEROL ES is still increasing.

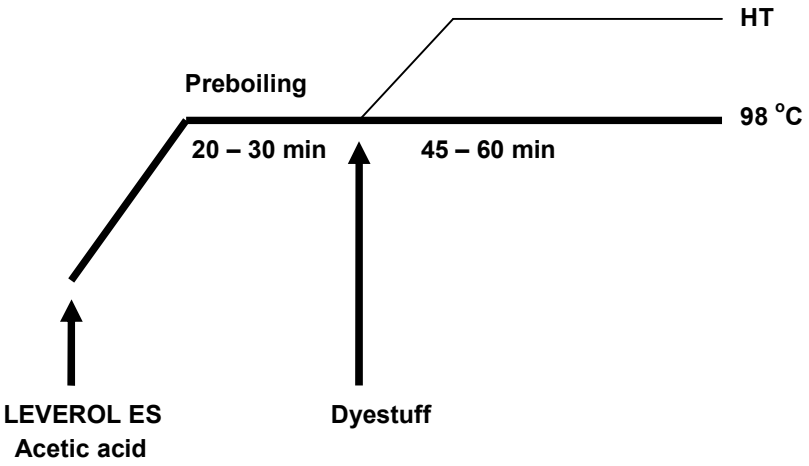
Shading additions can be added in most cases at dyeing temperature.

On PA goods with an extreme tendency to barriness LEVEROL ES gives optimum levelling of affinity variations, if the preboiling method is used.

Add to the bath

1.0 – 3.0 % ammonium sulphate or
0.5 – 1.5 % acetic acid 60% and
1.0 – 3.0 % LEVEROL ES

The goods are pretreated during 20 – 30 min. at the boil. The high levelling effect LEVEROL ES allows subsequent addition of acid dyes without cooling the bath. Dyeing is carried out during 45 – 60 min. at the boil or up to 120 °C.



For this process the following dyeing machines have proved their effectiveness: beam, bobbin, yarn, package, winches, rotary and paddle dyeing machines. The prementioned machines are excellently suitable on account of their satisfactory circulation of liquor resp. relatively high throughput.

Dyeing with disperse dyes:
LEVEROL ES has excellent levelling and dispersing properties on PA fibres. Amounts to be used are
0.5 – 1.0 g/l LEVEROL ES

Dyeing PA fibre blends:
LEVEROL ES can also be used with great success on fibre blends such us PA/CV. It is advisable, however, to check the compability of LEVEROL ES if the dye baths contain additional dye reserving agents. In this connection we wish to draw your attention to our product “LEVEROL TSE”, which is compatible in all cases with reserving agents.

Dyeing wool:
On account of excellent levelling effect and low foaming behavior LEVEROL ES is excellently suitable for the dyeing of WO especially with acid and milling dyestuffs. Amounts recommended are:
1.0 – 2.0 % o.w.o.g LEVEROL ES

PT. HYBRID chemical