

## Zips subjected to Bleaching

Bleaching is an important step in washing denim and is done through the use of various bleaching agents:

- Calcium hypochlorite
- Sodium hypochlorite
- Hydrogen peroxide
- Potassium permanganate

The first two chemicals are commonly used for every medium to vintage denim but when it comes to super vintage and light shades, potassium permanganate is quite often used.

Potassium permanganate is also used on 100% sulphur black denim fabric as a bleaching/reducing agent to get unique effects. As potassium permanganate is not production friendly a high degree of human expertise in the laundry is required to deliver consistently acceptable appearance.

Hydrogen peroxide is rarely used as a bleaching agent when less colour loss is required or if the fabric is sulphur top, as it takes longer time to give desired effect.

Immediate neutralisation of any bleached product is essential in order to avoid reduction of fabric strength, zip colour change, presence of bad odour, yellowing of fabric and skin irritation.

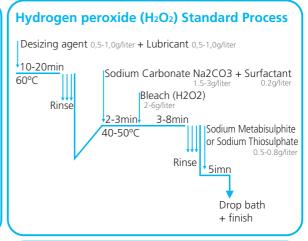
Bleaching agents can react with the metal zip components (e.g. sliders, top stops, bottom stops or open end parts) and can also cause colour changes. Depending on the type of bleaching agent, temperature and duration, the degree of the colour change may vary. In some cases, apart from the metal parts, the zip tape itself may be discoloured.

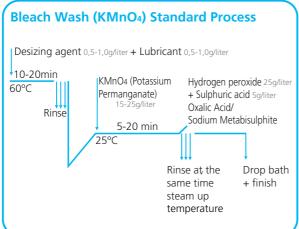
## Instructions for use of zips with cotton tape

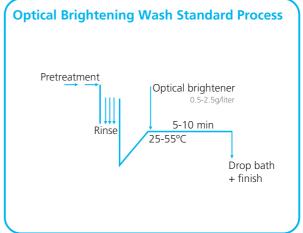
Coats Opti recommends that its customers follow the instructions in this leaflet for all zips produced with cotton tapes that undergo bleaching and optical whitening treatments.

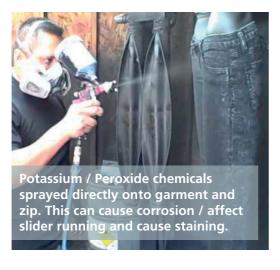
It is important that before performing any treatments on the garments, a preliminary test is carried out on a sample material. Coats will not accept any responsibility for damages resulting from treatments carried out under conditions which differ from the ones indicated in this leaflet.

## Bleach (NaClO) Wash Standard Process Desizing agent 0,5-1,0g/liter + Lubricant 0,5-1,0g/liter 10-20min 60°C Sodium Hydroxide 20g-25g/liter Bleach (Sodium Hypochlorite) 1.0g/liter 3-20min 25-55°C Sodium Metabisulphite or Sodium Thiosulphate 2g-2.5g/liter 5min Drop bath + finish













The treatment conditions as listed above have been formulated using laboratory tests carried out in specialised dyeing equipment. They guarantee the best results when used with our products. We would like to remind you that all treatments must be carried out on closed zips. Please account for the likely 5% (maximum) shrinkage that cotton undergoes when subjected to the above treatment.