K-FLEX 131

K-FLEX 131 is an acrylic retanning agent containing functional groups

TYPICAL ANALYSIS

Chemical nature Polyacrylate, colloidal dispersion

Appearance Viscous, off white liquid

 $\begin{array}{ll} \text{Charge} & \text{Anionic} \\ \text{pH (1:10 solution)} & 3.0 \div 5.0 \\ \text{Active substance} & 30 \pm 2 \% \\ \text{Light fastness} & \text{Excellent} \\ \text{Electrolyte stability} & \text{Excellent} \end{array}$

PROPERTIES

K-FLEX131 has an excellent selective filling action imparting tightness and fullness to the grain.

Due to its content in reactive groups K-FLEX 131 could be employed as a pretanning agent for particularly weak materials and it is also recommended in application with metal salts like chrome, aluminium and zirconium.

The product is stable in all environments and to all the chemicals commonly used in tannage.

Having an excellent light fastness, K-FLEX 131 could be employed in production of white leathers and pastel shades.

APPLICATION

K-FLEX 131 could be applied in every position starting from pickle pretannage until the end of fatliquoring.

We would recommend an offer of $2.0 \div 4.0 \%$ on shaved weight.

When correctly stored, it is stable 12 months.

This sheet is a synthetic illustration of the product to enable the user to employ it at the best.

Properties and values are not, therefore, sales specifications.

Taking into account the several possibilities of application of this product, no warranty of the results is possible.

Expiry date refers to the product well closed in the original container, in fresh and dry area. Some particularly sensitive products, when open, should be used rapidly.

Stir well before using the product, close tightly the container to preserve the properties.

K-FLEX 279

K-FLEX 279 is a tanning agent based on modified aldehydes.

TYPICAL ANALYSIS

Appearance Orange brown limpid liquid

pH (10 % aqueous solution) 4.5 \div 6.5 Active substance 35 \pm 3 %

Water solubility The product is dilutable with water

PROPERTIES

K-FLEX 279 behaves similarly to aldehydes, without the typical astringency. On pickled hides for chrome tanning it gives full and gummy leathers. It may also be used in retanning, anyway it is not recommended in the production of white or light coloured leathers, because of the yellowing typical of aldehyde products.

APPLICATION

From 2 to 3 % based on pelt weight in pickle float as a pretanning/tanning agent.

From 2 to 3 % based on shaved weight as a W.B. retanning agent.

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K-FLEX 340

K-FLEX 340 is an anionic resin tanning agent based on a water soluble acrylic polymer.

TYPICAL ANALYSIS

Appearance transparent limpid viscous liquid

Solids $30 \pm 2 \%$ pH (10 % solution) 6.5 ± 1 Lightfastness Good

PROPERTIES

K-FLEX 340 is suitable for filling and tightening all types of chrome and semichrome leathers. It is especially useful in tightening loose belly and flank areas and produces a mellow, round handle.

K-FLEX 340 have good applications in the neutralisation process before retanning.

APPLICATION

Amounts of use generally range from 3.0 to 6.0 %.

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K-FLEX 906 LIQ

K-FLEX 906 LIQ is a synthetic blocks polymer based on a polyamide of a carboxylic acid.

TYPICAL ANALYSIS

Appearance Orange-yellow dispersion

Solids $30 \pm 3 \%$ pH (solution 10 %) 6.0 ± 1.0 Uery good

PROPERTIES

K-FLEX 906 LIQ imparts to leather fullness and softness, acting alternatively or complementarily to traditional fatliquoring systems. It is fixed tightly to fibers, is resistant to oxidation and does not cause whitening. The resulting leather has particularly full, soft and silky hand.

APPLICATION

It is used during or after neutralization, on both chrome and vegetable tanned leathers, in amounts ranging between 6 and 7 %.

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K-FLEX AP

K-FLEX AP is an anionic resin tanning agent based on a water soluble acrylic polymer.

TYPICAL ANALYSIS

Appearance straw coloured limpid liquid

Solids $30 \pm 2 \%$ pH (10 % solution) 6.5 ± 1.0

Stability/Compatibility Stable throughout pH range

Light Fastness Excellent

PROPERTIES

K-FLEX AP is suitable for filling and tightening all types of chrome and semi-chrome leathers. It is especially useful in tightening loose belly and flank areas and produces a mellow, round handle. The product's independence of pH makes it a very versatile retanning agent. Due to the strong interaction between K-FLEX AP and the chrome within the leather, the maximum filling and tightening effect is achieved using the product immediately before the chrome retannage step, upgrading low quality wet blue. K-FLEX AP has excellent light and ageing fastness and is suitable for the production of white and pastel shade leathers.

APPLICATION

An amount from 2.0 to 4.0 % normally fulfils every kind of requirements.

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K-FLEX ARV

K-FLEX ARV is a glutaraldehyde tanning agent

TYPICAL ANALYSIS

Chemical composition Glutaraldehyde, *approx* 24 %

Appearance Light yellow liquid, with typical smell

pH (10 % aqueous solution) 3.0÷5.0

Water solubility The product is dilutable with water

PROPERTIES

K-FLEX ARV is universally suitable as a self-tanning and retanning agent on wet-blue hides in combination with syntans and vegetable tans. This product binds irreversibly to fibers so it has stable tanning effect on every kind of skins. When used in the retanning, it does not increase the specific weight of the finite hide.

APPLICATION

From 0.5 to 6.0 % in pickle float as a pretanning/tanning agent. From 0.5 to 2.0 % as a W.B. retanning agent .

When correctly stored, it is stable 12 months.

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K-FLEX DFS2

K-FLEX DFS2 is an anionic neutral syntan based on a nitrogen containing resin.

TYPICAL ANALYSIS

Appearance Fine white powder

Solid content > 92 %pH (analytical solution) $5.5 \div 7.5$ Lightfastness: Excellent Heatfastness: Excellent

PROPERTIES

K-FLEX DFS2 is recommended as a retannage for neutralised chrome stock. It is fixed under acidic conditions and has a selective filling action which improves the more open structured areas of leather.

This results in a leather with a full feel, tight flexible grain and uniform softness. It helps to promote level dyeing and even uptake of fatliquors.

K-FLEX DFS2 may be used on bovine or small skin wet blue for full grain leathers. Moreover it will assist in even buffing for corrected grain or nubuck leathers, in conjunction with other retanning agents.

K-FLEX DFS2 presents no problem under normal storage conditions and has an indefinite shelf life. Some caking may occur if the product is stored in warm damp conditions but this does not detract from its efficiency.

APPLICATION

Recommended offer from 2 to 5 %. For corrected grain or nubuck leathers an offer of 3 to 5 % is suggested, in combination with other retaining agents.

When correctly stored, it is stable 36 months.

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K-FLEX HQ

K-FLEX HQ is an anionic resin tanning agent based on a water soluble acrylic polymer.

TYPICAL ANALYSIS

Appearance yellow coloured viscous liquid

Solids $30 \pm 2 \%$ pH (10 % solution) 6.5 ± 1.0 Usery good

PROPERTIES

K-FLEX HQ is suitable for filling and tightening all types of chrome and semi-chrome leathers. It is especially useful in tightening loose belly - areas and produces a mellow, round handle. The product's independence of pH makes it a very versatile retanning agent. Due to the strong interaction between K-FLEX HQ and chrome within the leather the maximum filling could be obtained in retannage on exhausted chrome bath. It must be emphatized, however, that K-FLEX HQ should never be added directly to a bath containing high concentrations of chrome as precipitation will occur. K-FLEX HQ has excellent light and ageing fastness and is suitable for the production of white and pastel coloured leathers.

APPLICATION

In pre-tannage from 1.0 to 3.0 %.

In neutralization from 2.0 to 5.0 % .

In retannage from 2.0 to 4.0 %.

At the end of fatliquoring from 2.0 to 4.0~% as grain tightener.

When correctly stored, it is stable 12 months.

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Stir well before using the product, close tightly the container to preserve the properties.

K-FLEX L140 LIQ

K-FLEX L 140 LIQ is a highly concentrated liquid amino resin.

TYPICAL ANALYSIS

pH (10 % solution) 5.0 ± 1.0 Lightfastness Excellent

Solubility Miscible with water in every proportion

Stability Stable at all pH values

Compatibility Amphoteric, being compatible with resins

and anionic retanning agents and vegetable

extracts and chromium as well.

PROPERTIES

K-FLEX L 140 LIQ has excellent filling properties when used in retanning of chrome tanned leathers . Moreover, it doesn't modifies the typical hand character of chrome leather. Thanks its good filling and lightfastness, K-FLEX L 140 LIQ is suitable for white leathers and every kind of garment leather

K-FLEX L 140 LIQ is suitable both for full grain and corrected grain leathers and offers excellent buffing properties, in particular for suedes.

APPLICATION

2.0 % to 4.0% in retanning of chrome leather.

2.0 % to 6.0% during retanning of all articles.

When correctly stored, it is stable 12 months.

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K-FLEX OX

K-FLEX OX is a masked aldehyde.

TYPICAL ANALYSIS

Chemical composition Masked aldehyde
Appearance yellow to orange liquid

Water solubility Readily miscible with water Stability Stable throughout the pH scale

PROPERTIES

K-FLEX OX is particularly recommended for rechroming system: it will improve chrome uptake, giving fuller, softer leather, with fine, tight break. Being completely pH stable, it can be added safely at various process stages, offering the advantages of glutaraldehyde without any tendency to cause discolouration. K-FLEX OX can be added either before or after the chrome, as its safe neutralising effect does not cause over fixation on the surface. Retanning with K-FLEX OX before chrome enable reducing chrome offer and achieve an increase in the

Particularly suitable for tannage of pickled woolskins in combination with chrome where it reduces the risk of chrome stains and gives white wool.

When used as a neutralising agent for chrome leather, it fixes the chrome and virtually eliminates bleeding of chromium into the solution.

APPLICATION

shrinkage temperature.

In rechroming, from 0.5 % to 3 % In pretanning on woolskins, 2÷3 grams/litre In neutralisation, from 0.5 % to 2 %

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K-FLEX SE30

K-FLEX SE 30 is an acrylic polymer.

TYPICAL ANALYSIS

Appearance viscous limpid liquid

Solids content $30 \pm 2 \%$ pH (10 % solution) 6.5 ± 1.0 Stability to acidsStableStability to electrolytesVery goodLightfastnessVery good

PROPERTIES

K-FLEX SE 30 is an acrylic polymer which gives the leather good firmness though maintaining a soft and mellow hand.

It can be used both in acidic and in neutral conditions without problems.

It is especially suitable to minimize the problems of blowing of the grain on empty parts of leather ensuring a particularly fine patent.

Having good lightfastness, it may be used also for light shades and production of white crust.

APPLICATION

K-FLEX SE 30 is used in retanning with mineral tanning agents or after neutralization, from 3.0 to 6.0 %, depending on the particular requirements.

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K-FLEX TF LIQ

K-FLEX TF LIQ is an anionic resin tanning agent based on a water soluble acrylic polymer.

TYPICAL ANALYSIS

Appearance transparent limpid liquid

Solids $30 \pm 2 \%$ pH (10 % solution) 6.5 ± 1.0 Usery good

PROPERTIES

K-FLEX TF LIQ is suitable for filling and tightening all types of chrome and semi-chrome leathers. It is especially useful in tightening loose belly - areas and produces a mellow, round handle. The product's independence of pH makes it a very versatile retanning agent. Due to the strong interaction between K-FLEX TF LIQ and chrome within the leather the maximum filling could be obtained in retannage on exhausted chrome bath. It must be emphatized, however, that K-FLEX TF LIQ should never be added directly to a bath containing high concentrations of chrome as precipitation will occur. K-FLEX TF LIQ has excellent light and ageing fastness and is suitable for the production of white and pastel coloured leathers.

APPLICATION

In pre-tannage from 1.0 to 3.0 %.

In neutralization from 2.0 to 5.0 %.

In retannage from 2.0 to 4.0 %.

At the end of fatliquoring from 2.0 to 4.0 % as grain tightener.

When correctly stored, it is stable 12 months.

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K-FLEX TV LIQ

K-FLEX TV liq. is an acrylic polymer.

TYPICAL ANALYSIS

Appearance yellowish limpid liquid

Solids content $30\pm2\%$ pH (10 % solution) 6.5 ± 1.0 Stability to acids Stable Stability to electrolytes Very good Lightfastness Very good

PROPERTIES

K-FLEX TV liq. improves the fulness of chrome-tanned leathers and the tightness of the grain, and reduces their elasticity.

It is very effective in combination with vegetable tanning agents: speeds up vegetable tanning processes, improves the fulness of the resulting leather and bleaches its colour.

APPLICATION

Amounts range from 3.0 to 6.0 %, depending on the particular requirements.

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