



AQUADERM® X-PIGMENTS

Play of colours - when high performance meets consistency

» Water-based pigments for leather finishing



TFL – Great chemicals. Excellent advice.



Performance meets consistency

Ultimately, it's the finishing that gives leather its beautiful colour, its brilliance and its unique appearance. So there is a correspondingly strong demand for top-level leather products to create articles of the highest quality.

At the same time, innovative solutions are needed to comply with challenging environmental regulations and specific industry requirements regarding eco-efficiency and consumer safety.

That's why the water-based pigment range AQUADERM® X-Pigments has been developed. They deliver state-of-the-art performance characteristics while at the same time meeting all current demands for future-oriented finishing.

Water-based pigment solution

AQUADERM® X-Pigments have been specially designed for all kinds of premium leather applications where a very high standard of finishing quality is required, e.g. in the automotive segment. On the basis of carefully selected raw materials, excellent light fastness, heat and migration resistance, brilliancy and exact dosing properties can be achieved with AQUADERM® X-Pigments.

Besides, finishers benefit from their reliable product consistency, which is extremely important to ensure consistent colour reproducibility. Another decisive strength of AQUADERM® X-Pigments is the improved sustainability profile of this advanced water-based pigment range.

AQUADERM® X-Pigments fulfill all major regulatory and industry requirements on ecologically produced leather that complies with the highest consumer protection standards. The entire product range consists of solvent-free pigment dispersions featuring very fine particles and only a low acrylate-based polymer binder content.

What's more, all products are casein-free and contain no emulsifiers, brightening agents or other additives capable of causing migration. According to current RSL, REACH and GADSL obligations, AQUADERM® X-Pigments meet the following criteria:

- VOC-free (according to European directive 1999/13/EC)
- Free of heavy metals, such as mercury, cadmium, lead and arsenic
- Chrome(VI)-free
- Formaldehyde-free
- Phthalate-free
- Free of NMP, NEP and DMFA

The defining features of AQUADERM® X-Pigments are premium-level leather appearance and brilliancy combined with the satisfaction of a wide range of essential environmental and safety requirements.



AQUADERM® X-PIGMENTS –
designed for premium
leather application

EUDERM® X-GRADE SF



The ideal complement for using organic pigments



Remarkably higher colour strength and more brilliant colour shades are what tanneries are looking for. Organic pigments however have a lower covering power due to their chemical composition.

For this reason, it is recommended to use EUDERM® X-Grade SF as the perfect addition to the organic AQUADERM® X-Pigments.

Beside its excellent hiding and upgrading power, this single finishing auxiliary significantly increases the covering power of such pigments without, however, negatively affecting their brilliancy.



Testcard for determination of covering power

In testing, organic pigments show a clearly improved covering power when combined with EUDERM® X-Grade SF.

EUDERM® X-Grade SF is suitable for all kinds of pigmented leather and has been designed to be used in high amounts as a single filling and upgrading agent in base and colour coats applied by roll coating or spraying. Simultaneously it also works as a matting agent.

EUDERM® X-Grade SF is well known for its high performance in reducing tackiness during e.g. embossing, enhancing the covering effect of grain side defects and levelling out unevenly dyed crust leather.



Selecting the right colour

| Full shade | Brown*/white** reduction | Full shade | White** reduction |
|-------------------|--------------------------|----------------|-------------------|
| | | | |
| X-White CR | | X-Brown C | |
| | | | |
| X-White C | | X-Bordeaux C | |
| | | | |
| X-White S | | X-Dark Brown C | |
| | | | |
| X-Lemon B | | X-Blue B | |
| | | | |
| X-Golden Yellow B | | X-Violet B | |
| | | | |
| X-Orange B | | X-Green B | |
| | | | |
| X-Red B | | X-Black B | |
| | | | |
| X-Red Violet B | | X-Black C | |
| | | | |
| X-Caramel C | | | |

* 100 parts AQUADERM® X-White C or X-White S with 40 parts AQUADERM® X-Brown C

** 20 parts AQUADERM® X-Pigment with 80 parts AQUADERM® X-White C

Colouristic properties and performance

| Pigment type | Character | Solids approx. % | | | | | | | | |
|-------------------|------------------|---|----|---|---|---|---|---|------|-----|
| | | Lightfastness EN ISO 105-B02 full shade | | | | | | Lightfastness EN ISO 105-B02 Reduction with white | | |
| | | Heat Yellowing at 100°C 144h full shade | | | | | | Heat Yellowing at 100°C 144h Reduction with white | | |
| | | Fastness to migration DIN53343 on plasticized PVC | | | | | | Covering power | | |
| | | | | | | | | Brilliancy | | |
| X-White CR | Titanium dioxide | Pigment for white finishes (reddish) | 65 | 7 | 7 | 5 | 5 | 5 | xxx | x |
| X-White C | Titanium dioxide | Pigment for white finishes | 65 | 7 | 7 | 5 | 5 | 5 | xxx | x |
| X-White S | Titanium dioxide | Economic for shading | 62 | 7 | 7 | 5 | 5 | 5 | xx | x |
| X-Lemon B | Organic | Greenish, light yellow | 28 | 7 | 7 | 5 | 5 | 5 | x | xxx |
| X-Golden Yellow B | Organic | Warm yellow with high brilliancy | 33 | 6 | 5 | 5 | 5 | 5 | x | xxx |
| X-Orange B | Organic | Brilliant, warm orange | 26 | 7 | 7 | 5 | 5 | 5 | x | xxx |
| X-Red B | Organic | Neutral red | 28 | 6 | 6 | 5 | 5 | 5 | xx | xxx |
| X-Red Violet B | Organic | Brilliant typical red violet | 27 | 7 | 6 | 5 | 5 | 5 | xx | xxx |
| X-Caramel C | Iron oxide | Yellow type with very high covering power | 57 | 7 | 7 | 5 | 5 | 5 | xxx | x |
| X-Brown C | Iron oxide | Reddish brown | 55 | 7 | 7 | 5 | 5 | 5 | xxxx | xx |
| X-Bordeaux C | Iron oxide | Neutral brown | 50 | 7 | 7 | 5 | 5 | 5 | xxxx | xx |
| X-Dark Brown C | Iron oxide | Neutral dark brown | 56 | 7 | 7 | 5 | 5 | 5 | xxxx | x |
| X-Blue B | Organic | Neutral blue | 28 | 6 | 6 | 5 | 5 | 5 | x | xxx |
| X-Violet B | Organic | Dark bluish violet | 19 | 6 | 6 | 5 | 5 | 5 | x | xxx |
| X-Green B | Organic | Bluish green | 28 | 7 | 7 | 5 | 5 | 5 | x | xxx |
| X-Black B | Carbon black | Brilliant black also for shading | 20 | 7 | 7 | 5 | 5 | 5 | xxx | xxx |
| X-Black C | Carbon black | High solid pigment for black finishes | 32 | 7 | 7 | 5 | 5 | 5 | xxxx | xx |

Fastness to migration (According to grey scale ISO 105-A03)
 5 = no staining of plasticized PVC
 4 = slight staining of plasticized PVC
 3 = noticeable staining of plasticized PVC
 2 = pronounced staining of plasticized PVC
 1 = very pronounced staining of plasticized PVC

Covering power
 x = low
 xx = moderate
 xxx = high
 xxxx = very high

Brilliancy
 x = low
 xx = medium
 xxx = high



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