# 4931 SKINTONE-CARD (big size)

Technical					
format thickness	DIN A4 (210x296mm) 1mm				
material	polystyrène white (fro	ostwood	)		
colour stability	7-8 Blue wool Scale				MUTHWIND
	washable				4931
Colours		С	М	Y	ND
	Fond	Ũ		•	
	refl.value R%	80	40	15	30
	Density log. D	0.10	0.40	0.82	0.30
	Dark brown				
	refl.value R%	10	7	7	8,5
	Density log. D	1.00	1.15	1.10	1.07
	Orange				
	refl.value R%	70	31,5	10	44
	Density log. D	0.15	0.50	1.00	0.36
	Neutral Grey				
	refl.value R%	17,68	17,68	17,68	17,68
	Density log. D	0.75	0.75	0.75	0.75
	Skin tone, ruddy refl.value R%	50	04.5	00	10
		56	31,5	20	40
	Density log. D	0.25	0.50	0.70	0.40
	Skin tone, pale refl.value R%	80	50	28	60
	Density log. D	80 0.10	50 0.30	28 0.55	60 0.22
	Density log. D	0.10	0.30	0.55	0.22

# **Application**

We are all particular when it comes to the rendition of skin tones.

A persons's complexion is scrutinized very closely by the photographer, the model herself and, once published, the observer. Already for an ordinary photography we have to pay attention to the skin tones.

Once more for an portrait, beauty or nude-photography.

We have an opinion, how skin looks, has to look. Even the variants of different types we are able to recognize if we got some experience and the picture discover more characteristics of the person. A insufficient reproduction or a clumsy manipulation we detect with out knowing the reason. With the picture something seems to us **wrong**, not realistic, not plausible.

Therefore, portrait or nude photography won't work without precisely filtering and exposure. You should work carefully, plan your photography. Choose **your** film before starting your work. After doing some tests, for your opinions and its aptitude for the reproduction of skin tones.



In general, a film with steep graduation is for the reproduction of skin tones unfavourable. The skintone **corrode**, the light becomes a whole, discovering the paperbase. Otherwise you can counter the steep graduation of a film only by using smoother light sources.

Or you exploit this phenomenon, while using it for compensating smoother ligth situations in rain. In gleaming light of inner rooms, indirect flash ... In any cases, search for a film which will fit, don't use what you already have!

The expense for the arrangement of such photographys is too big. Maybe you had costs for the modell etc... Searching for the right film is even better.

The **remaining** work for you will be done with coloured light and through filtering - our reference charts should be helpful.

The skin-tone chart is not merely useful for the complexion but finds application in other fields, such as photography of jewellery and ceramics. Our experience show that pictures of minerals and metals can be filtered more precisely with the skintone chart than on the basis of neutral grey. This applies equally to all natural materials with earthlike tones, stone and sand.

Don't expect that a skin tone chart reproduce all possible skintones or a nomenclature of their important variances. In sense of, got the motive rather the skin tone number one or number four, and on which number I have to trim the reproduction. In this regard the so-called middle skin tone is not useful for the norm.



Every skin tone is an unproportinal colour distribution, and therefore the middle skin tone is always in relation to and a slave of the lightcolour. That means, if the light temperature is changing, the reference would differ too.

A reference especially for skin tone reproduction cannot be an unconditional reference like neutral grey and it cannot be used like that.

There will be never be an absolute, mandatory reference specially for skin tones like there is for neutral grey.

The point of the skin tone charts ist to provide a means of reference so that the photographer can make the best of the film rendition through shifting colour balance in the most favourable direction, without loosing seldom variances of skin tones.

To say things easy:

If a negative is filtered exactly on the basis of our chart, the skin tones will be given preferential treatment and will therefore come out correctly.

Surrounding colours may come off a little worse, of course. If they are found to be of equal importance, a compromise can be reached through giving an intermediate amount of correction. Details follow later.



The skincard should not leads to the correct reproduction only of the so-called middle skin tone, (nor to push the motive in that direction) but it leads to the correct reproduction of the whole spectrum of all possible skin tones.

The condition of the present reference is the **white** typ and for the **black** skintyp you should use the darkbrown field.

The immediate comparison of a skinpart with the skin chart will be the wrong way. Additional, it is unpossible to show the living tone of skin by using a plain colour or to compare them.

#### Skin is living.

You cannot reproduce it through a middletone. It has vains, skin varies in all partitions of the whole body and the things around interakt with it, shadow, colour interaktion ...

Skin is a complex impression which we remember total and not a tone which we can detect on one part of it. An impression, build out of many hues.

Once compare the contrast of two skinparts in one photography. Then estimate the range und afterwards do a measurement of it.

Definitely you underestimate it. Ours is the tendency to middle and to level.

The intensity of a respective teint is a question of the present light situation.

Watch the play of light and shadow on parts of the body. Under trees a face seems to be green, ...

If we can recognize the reason of a shadow, then the colour deviation is plausibel.

Otherwise we will registrate it as a disturbation. If filtered away, although its reason remains in this picture, like in our example the green of the trees, then they would become too dark and the picture seems unplausibel.

In paintings we can study how skin is shown through different colours. View with consciousness a painture of Rubens, the master of skin performance.

Exaggerated spoken you find there pink, yellow and greyblue figures. Alltogether they will form for the reminder the impression of skin. Even the placement plays for that impression an important role. And the background and all accessoires are binded to build up the impression of skin. The fields of the skinchart are not counted as an avarage value, but as a representing counterpart for filtering.

Arrange the skinchart at the border of your photography. Achieve the goal of filtering, that is the maximum of equivalents between reproduction and original card.

With the correct filtering of the base of the skincard, which here is the weekest link of the chain, you push the whole chain, that means the complete range of all possible skintones in the maximum of the reproduction.

#### Balance of colours

On closer inspection, we discover that the average colour of skin comprises, essentially, the dyes magenta and yellow. The cyan component ist rare. Seen in this light, we are already dealing with a so-called **dominant** colour in the field of portraits and nudes.

For the reproduction of a **dominant** colour is the equalization of all colours not essential. In the opposite, the normally recommendet filtering on the base of neutral grey will not fit the highest demand.

Indeed, there is not a single film on the market which exhibits a perfectly balance spektrum of colours. Even those films which are described in tests as having **excellent characteristics** with reference to neutral rendition will never reproduce **all** colours with equal fidelity and in every respect.



The truth is that, in practice, most colour films fall short to perfection when you try to reproduce the subtleties of skin.

This is in spite of the fact that the photograph may convey the general, overall impression of beeing correctly filtered and of pleasingly neutral colour balance.

The wholesale recommendation of filtering a print so that it corresponds to neutral grey is therefor not the last word in exacting portraiture. After all, it is particularly in the yellow layer that most films still exhibit serious deficiencies.

So that pure yellow and green hues - which must be formed in the subtractive colour system without any magenta component - are not lacking in relative saturation, more yellow dye (and sometimes red) is added to these layers.

From the outset, the colour balance of most films is thus shifted away form cyan, a component which is hardly used at all in the creation of skin tones. We can exploit this situation through ignoring the intentions of the manufacturers and simply filtering selectively on the dominant skin tones.

Filtering of portrait and nude photography, where we mainly take a view of the yellow-red skin tones, on neutral grey leads already to a good result for the whole spektrum. It will be still better when your are filtering *selectively* on the *dominant* colour.

The inherent or **artifical** colour balance of a film can therefore be manipulated in the direction we want when filtering. It should be done judiciously, however, since such manipulations become noticeable - form a certain degree of personal intervention onwards - in the colour shade of the surroundings or background.

This is especially true if we are familar with the natural colours of this objects in real life. After all, when we correct the skin-tones to a more pleasing hue, the entire complement of colours will shift wholesale in the same direction.

The result is a wholesale gleam of the picture, which the professional detects soon for example in the white fields (eyes).

Where critical subject matter is concerned, it is recommended to proceed in two steps: in the *first test run*, use the base colour of the Fotowand chart and, for the *second step*, take the neutral grey reference patch.

The idea of the second test is to provide a neutral, second opinion for a possible fine adjustment to the first filter setting.

For the final print, all you have to do is to take the mean of the two filter densities. The result can always be biased, if desired, towards either the base colour of the chart or the neutral grey patch.

The following example is an illustration: Overfiltering of so-called **solar- bank-brown** seems merely unrealistic, if it is a wholesale gleam over the photography. Will it be catched by the surroundings, through an neutral background or an object in an intensive complemental colour, for example clear blue, then such a picture will nevertheless effect on the reminder plausibel. Because the complete totality of colours is inherent.

You can reach these phenomenon with twilight too, while ligthen your motive warmly and at the same time, lighten a **First-Sight-Catcher** neutral or the surroundings in the complementary light temperature.

Beam the body in a picture for example with orange light and at the same time a lemen with neutral light. So the trace of your manipulation cannot be light detected.

Lemonyellow is very critical for becoming dirty and its true colour is more familar to us than every skin-tone. A falsification of it will be trapped directly. But if the reproduction of the lemon is correctly, our eyes will believe the **cracking** brown in this picture, even if it is mighty exaggerated.

Even these little details helps the picture, making us believe them as trueth, these accessoirces of an arrangement. They plays in the picture mostly the role of legitimation for a colour deviation. Our eyes will fastly believe the trueth of a complete picture, even if there exist only some indicators.

If you make a photo of a group of persons, it is mostly very difficult, to detect the one person with the relevant teint for all of them. This critical skin-tone is the weakest link in the chain. Please filter in such cases first on the base of the skinchart and then correct the print in direction of the teint, which was reproduced unsatisfactory.

# Fields of the skin-chart

The base of the skincard is the basicly reference for filtering a portrait.

Sometimes you don't take a neutral greycard with you, surely you can use the skin-tone chart for exposure reference.

But because of the fact that the reflexion value of the skincard differs from the reference of our exposure meters (that is the neutral grey with a log densitie of 0.75, or a reflexion value of 17.68 %), you must correct the measured value corresponding for 1 and 1/2 time or blind steep.

That means you must lengthen the exposure or open the blind corresponding.

(The reflexion value of the base of the skincard is 50% and the log densitie 0,30, see the technical specifications).

#### Please notice:

The skincard has to be placed next to the object facing the camera.

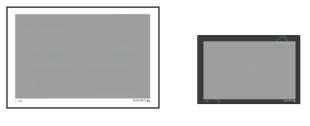
In the case of a strong deviation of light direction - that is, the direction of the object to the strongest source of light: sun, sky, lamp - from the shooting direction; for example when the sun comes from the side, you hold the skincard between camera and main light source; that is, at an angle in the middle of both directions.

Always hold the exposure meter at a distance of 15 to 20 cm in front of the reference card without throwing a shadow on it.

If you are using the built-in exposure meter of your camera and this has an integral and centre-accentuated metering system, please take care to focus the card in full format, otherwise the measuring will be wrong.

In no cases the reference should be shadowed or lightened during the measurement or while shooting the picture. For example, if you stay in the wood, you would easy forget to notice the shadows of the trees! Of that, the picture later, when working out, would be falsificated.

For exposure measurement we recommendate the parallel or additional use of our **neutral grey card** because of greater exactness and better handling. That means, you should exposure on the neutral grey card without picturing the card. But for later filtering you should put the skin card in the picture or on its border.



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If you photograph people with **dark** colour, then please use the darkbrown field instead as basicly reference.

Has your picture essential parts in the complemental colours, that means from bluegrey to pink or in the intensive and gaudy colours, then make an additional filtering test-strip on *neutral grey*. And for the last fine adjustment middle between either the base colour of the chart and the neutral grey patch, corresponding to her weight.

This way you should take in all that cases, where intensive or gaudy colours of familar objects in the background or in the surrounding would be falsificated through filtering on the skin-tones.

The field with the *pale* skin-tone is a reference for the pale teint, and the **reddish** field for a more red teint or if the lips should be more noticed.

What is the use of the *orange* circle, which will never occur as a skin-tone? It seems more orange then it is. Please watch this isolated.

It has a special task as an indicator for the red portion of the light.

Under neutral or blueish light the patch is more prominent, if the light is increasing red or more magenta, then the patch is in his saturation less visible. This you can see during the shoot and even later on the print. It's a help to assess orange or red overfiltering.

If you like to have a warm illumination, then filtering fits better on these orange field instead on the base of the skincard. That already means, maximum equalizating of the reproduction of that field with its original, and not to turn a corner round.

Likewise the *reddish* field is an indicator for blueish light or cyan overfiltering, because under blue illumination it is less visible, compared to the base.

Watch these changings once in the morning sun or at evening or under different artificial illuminations.

At last, the *neutral grey* field is a reference for neutral filtering in the discussed cases of essential portions in complemental colours to middle. It is an absolut reference for the deviations of light temperature during shooting the photography and for a later judgement of the print under different light sources.

## Setting of the exposure timer

If you are going to work out a complete series of **skin**-pictures, then set the exposure timer on neutral grey. The correct working results of your referencecard photograph have given you the values for setting your exposure timer.

Place the measuring probe of the timer under the projection of the negative of the referencecard



and set the time that you have determined in the course of your test enlargement. Now set the instrument to mid-zero with the control for the paper guide value.

Thus you have achieved the testing of the paper guide value.

Take a note of the value, it is relevant for the paper used.

From then on you need not work out the reference card photograph every time you take a series of photographs under different light conditions.

You just set the determined paper guide value, place the measuring probe on the enlarger easel and then set the correct exposure time with the time control by setting the meter to mid-zero.

This time value is valid for the whole following series of photographs.

## Analyzer programming

Take a reference card photograph taken at a standard value corresponding to 5500° Kelvin colour temperature. Most electronic flashes produce such a light. The correct filtering of this standard light reference card photograph gives you the basic filtering. Judge the result under this normlight too (we recommend our daylight-lamp 5000° Kelvin, 500W, N° 4799 (Daylight) and N° 4798 (Artifical Light).)



To program your analyzer you proceed similarly as with the exposure timer. Instead of turning the control for the guide number, you set the instrument to mid-zero with the control for the colour channels.

For those photo series where other colour temperatures were used, you only have to align to zero by changing the filtering values of the preceeding reference card shot. *This filter setting is valid for the whole succeeding series.* 

Sudwalde, May 2005



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