Techniques Chimiques Nouvelles

A Colorful World

YouTube

TCN - Techniques Chimiques Nouvelles 20, rue des carriers italiens 91350 GRIGNY (France)

Phone: + 33 1 47 35 07 63 office@color-tcn.com www.techniques-chimiques-nouvelles.com

BK22-CO-01

DYEING PRODUCTS FOR ORGANIC LENSES

CRX DYEING POWDERS

CRX dyeing powders are suitable for the coloration of organic lenses. They are used in solution with demineralized water.

TCN packages now its dyeing powders under individual hydrosoluble bags

1 bag or 10g of powder for 1 liter of water

Packaging in 5 or 10 kg

For an easier handing which doesn't occur dust

Available in 26 standard colors

For safer and cleaner use

Suitable for the coloration of organic lenses

SUMMARY

3 CRX coloring powders for organic lenses

6 CRX-Th liquid dyes for therapeutic colors

8 Carrier 7820 HDX for high index lenses

9 Dyeing powders CRX-Hi

10 PCL4 liquid dyes for polycarbonate

PCL4 liquid dyes

for polycarbonate material

PCL4 concentrated liquid dyes are suitable for tinting uncoated polycarbonate material.
They are mainly used for sports and safety eyewear, screens and visors.

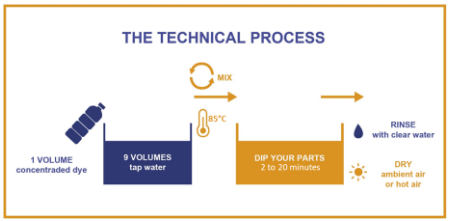
Material
Bear Polycarbonate, Trivex®, tri-acetate.

Advantages
Easy-to-use dyeing process.
Stable and uniform coloration.
Realization of degraded colors.
No discoloration during the coating step.

Packaging
1 liter jerrycan with a measuring cap.
5 or 10 liters jerrycan.

Storage
1 year in tightly closed packaging under usual storage conditions.

Shades
A range of 12 standard colors is available. Many colors can be achieved through mixing.



INSTRUCTIONS FOR USE

Prepare a dyeing bath by diluting **PCL4 liquid dyes**
with water. Heat it up.
1 volume **PCL4 liquid dyes** + **9** volumes water at a temperature of **85°C +/-2°C**.

Stir well and let stabilize for few minutes.
Dip uncoated polycarbonate lenses in the dyeing bath during 2 to 20 minutes according the required intensity. A slow agitation of lenses is required during the coloration.
Rinse immediately with water.

RELATED PRODUCTS

Preparation
For an optimum evenness, a dipping for few minutes in a solution at 85°C containing 100 ml/l of ***8625 PCL4 Surface preparation*** is recommended.

Cleaner
7520B cleaner is suitable for an effective cleaning of tanks and holders,

Discolorant
Inconvenient shades can be removed off with ***8626 PCL4 discolorant***. Dip lenses for few minutes in pure ***discolorant*** at 85°C. Rinse with warm water.

Coloration of organic lenses
CR39® lenses are easily dye with our ***CRX dyeing powders*** (technical bulletin n° 20 CO 11).

Heat transfer liquid
5880 heat transfer is a liquid for heating machine. Not volatile, it does not form fumes.

CRX dyeing powders

for organic lenses

CRX dyeing powders are in the form of powder. They are used in solution with demineralized water.

Material
CR39® organic lenses and coated lenses.

Advantages
Easily dissolved in water.
Stability of the dyeing bath.
Quick dyeing.
Non-voluminous storage.
Good evenness.
Low-priced process.

Packaging
Our packaging is adapted as required by manufacturers, laboratories and opticians:
- Metallic pail of 5-10 kg.
- Plastic box of 500 g.

Individual hydrosoluble bag of 10g
For simple use without generating dust.

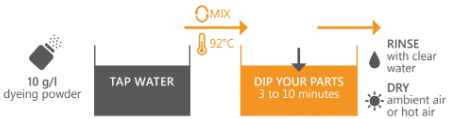
INSTRUCTIONS FOR USE

Dissolve **CRX dyeing powders** in warm demineralized water.

10 g CRX dyeing powder for **1 liter** of water
or
1 CRX hydrosoluble bag for **1 liter** of water.

Heat at 92°C (+/- 2°C):
Stir and let the bath stabilize for 10 minutes before use. Dip the lenses for 3 to 15 according to the required color.
Rinse immediately with warm water.

THE TECHNICAL PROCESS



ESSENTIAL PRODUCTS

Anti-UV treatment
5502P anti-UV allows an ultra-violet filtration in the 350-400 nanometer range.
For CR39® organic lenses, used at 35 g/l water at 92°C, for 5 minutes.

Discolorant
4080 discolorant pure is suitable, hot to remove a non-compliant color.

Heat transfer liquid
5880 heat transfer is a liquid for heating machine. Not volatile, It does not form fumes.

Shades

A range of 26 standard colors is available and all miscible with each other to achieve an infinity of colors.

RELATED PRODUCTS

Cleaner
7520B cleaner is suitable for an efficient cleaning of tanks and utensils.

Red absorber
Annoying red tones could appear on dark tinted lenses.
A brief dipping in a solution of **8425 red absorber** (100 ml/l) corrects red reflects

Coloration of PC
Polycarbonate lenses are easily dye with our **liquid dyes PCL4** (technical bulletin n°20 CO 42).

Wastewaters treatment
8500PAX coagulant allows a primary treatment by precipitation/flocculation of wastewater.
Recommended use at 10 g/l.

SERVICES

Formulation and realization of shades on demand
Color matching of CRX dyeing powders from a Pantone® or RAL® reference.

« The principle of color combinations »
Our booklet recalls the essential chromatic properties to obtaining particular colors. It's a mini-guide that explains how to build your dyeing baths.

Spectrocolorimetric analysis
To guarantee ever more performance to our customers and partners, TCN is equipped with a **spectrocolorimetric device** to ensure: The L*a*b color measurement of a tinted piece, in reflection and transmission, under different illuminants.
Reproducibility and conformity of each batch of dyes.
Precise color matching of specific shades.

UV aging test
Our xenon lamp equipment allows to simulate aging tests and know the UV resistance of our dyes.
Our customers can ensure the behavior of their colorful pieces and the change in properties of their materials by solar radiation in a short time.

Dyeing powders CRX-HI

for high index lenses

Our CRX-Hi dyes are available in powder forms.
It is a version of the CRX powders which allow to color more efficiently and quickly the high index lenses. They are used in solution in demineralised water to color organic lenses.

Materials

CR39® organic lenses, high index (1.60-1.67) and coated lenses

Packaging

5 or 10 kg metal pail.

500 g plastic can.

Storage

1 year in its original packaging under normal storage conditions. Avoid humidity and heat.

Brown

Brown
-
8637

Green

Green
-
8638

Grey

Grey
-
8639

Carrier 7820 HDX

For high index lenses

The HDX 7820 Carrier is a stand-in that allows to significantly reduce the dyeing time of high index organic lenses.

The advantage of high index lenses is that the more the index of the chosen lens is high, the less thickness the lens will need to give an equal power. The inconvenient is that they are more difficult to tint than standard lenses.

The HDX 7820 Carrier accelerates the coloration time: from 2 to 4 times faster than it takes for a lens that has not been pretreated.

Material

High index organic lenses (1,60-1,67).

Avantages

Easy dissolution in water

Quick efficiency

Time saver

Acceleration of the lenses coloration

INSTRUCTIONS FOR USE

The implementation is very simple and happens prior to the dyeing operation.

The HDX 7820 Carrier is used in a bath at 92°C, pure or diluted, as pre-treatment.

1) Dip the high index lens in the HDX 7820 Carrier bath, pure or diluted at 50% with water. Clean the lens with hot water.
2) Dip the high-index lens in the coloration bath (10 g/l of CRX) for 3 to 15 minutes according to the intensity that you want to obtain. Clean the lens with hot water

Packaging

The HDX 7820 Carrier is in liquid form, packed in 1L and 10L jerrycan.

Stockage

1 year in its original package in regular storage conditions, safe from light and heat.

① Pretreatment	② Tinting	③ Eventual Correction
Carrier 7820 HDX - 92°C (5 min)	CRX 10 g/l 92°C (10 min)	Blue CRX 10 g/l 92°C; Yellow CRX 10 g/l 92°C; Red CRX 10 g/l 92°C
Rinsing with water	Slow and continuous stirring then rinsing with water	

Yellow and Orange

Fluo yellow - **5944**	Lemon yellow - **8043**	Golden yellow - **3441**	Orange - **5945**	Orange - **8963**

Pink and Red

Pink - 3442B	**Fuchsia - 8168**	**Violet - 3735B**	Mauve - 3449 C	**Scarlet - 3443B**	Red - 8153B

Green and Blue

Anise - 6755	Green - 3467B	Green - 3450B

Blue

Blue - 5770	Blue - 7690B	**Blue - 3437**	Night blue - 3438B

Brown

Pink brown - 3466C	Olive brown - 3446B	Smoke - 3447C	Brown - 6785C

Grey and Black

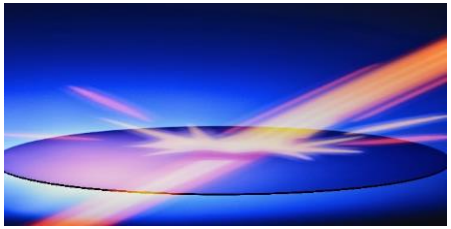
Neutral grey - 3444C	Grey blue - 3445C	Grey green - 5661B	Black - 5894C

pure colors are listed in bold

Liquid dyes CRX-Th

Therapeutic colors

CRX-Th dyeing powder tints CR39® lenses by filtering different wavelengths ranging from 400 nm to 600 nm.



The CRX-Th liquid dyes act as chromatic filters for therapeutic use by absorbing specific wavelengths. This increase visual comfort by reducing glare and enhancing contrasts.

Material

CR39® organic lenses, 1,60 lenses, polycarbonate lenses.

Packaging

Jerrycan of 1 liter with measuring cap

Jerrycan of 5 - 10 liters.

Storage

1 year in tightly closed packaging in usual conditions of storage. Avoid humidity and high temperature.

Shades

8 products present cut-off wavelengths ranging from 400 to 600 nm: 1 powder product with a cut-off wavelength of 400 nm (35 g/l) and 7 orange to red shades with a cut-off wavelength of 450 to 600 nm.

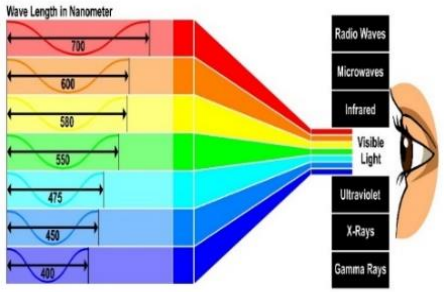
INSTRUCTIONS FOR USE

Build up a dyeing bath by diluting the **CRX-Th liquid dyes** with water. Heat it up.

1 volume **CRX-Th liquid dyes** + **9** volumes **water** at a temperature of **92°C (+/- 2°C)**.

Stir well and let stabilize for few minutes. Dip the lens in the dyeing bath for 10 to 60 minutes according to the required cut-off wavelength.

Rinse with water.

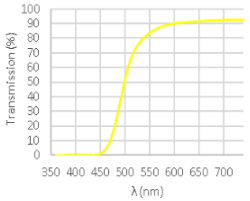


Color chart

Yellow

-

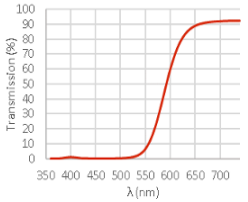
450 CRX-Th



Orange

-

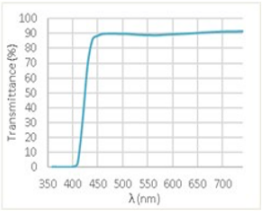
527 CRX-Th



Anti-UV

-

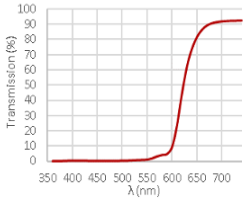
5502P



Scarlet

-

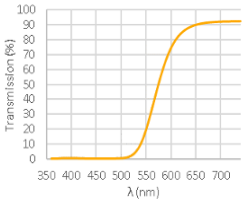
550 CRX-Th



Orange

-

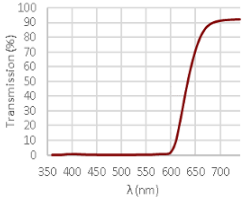
500 CRX-Th



Red

-

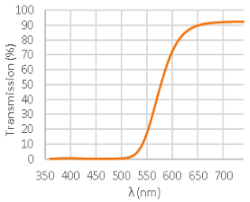
580 CRX-Th



Orange

-

511 CRX-Th



Red

-

600 CRX-Th