



# CATALOG

**COLORATION**

**ORGANIC LENSES**

**BK25 COLO-LENSES**

**TCN**  
**20, rue des Carriers Italiens**  
**91350 Grigny - FRANCE**



[www.techniques-chimiques-nouvelles.com](http://www.techniques-chimiques-nouvelles.com)



[office@color-tcn.com](mailto:office@color-tcn.com)

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## **SERVICES**

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“

**Choosing TCN means  
opting for quality,  
innovation and**

**recognized expertise in**

**the field of organic**

**lens coloring.**

For more than 60 years, TCN has been designing, manufacturing and marketing high-quality coloring preparations.

Thanks to our extensive experience, we offer a wide range of coloring products specifically designed for the organic lenses market, regardless of the polymer used.

Our products are made from rigorously selected synthetic dyes, chosen for their exceptional coloring power and ability to meet the highest ophthalmic standards.

Our packaging meets industrial needs of all sizes. Our outer packaging, with its minimalism and sobriety combine efficiency, adaptability and respect for the environment.

”



## **LABELS & CONFORMITES**

### **Our dyeing powders are free of controversial substances.**

Corporate Social Responsibility (CSR) is a voluntary commitment on our part. We integrate social, societal, environmental and economic issues into our activity. As a player in the Chemical Industries, our commitment is strengthened and materialized: our coloring powders contain only raw materials that allow Oekotex standard 100 certification, i.e., in accordance with the Textile certification of non-hazardous for direct contact with the skin.



**REACH REGULATION  
EC 1907/2006**





# BENEFITS



## Colors

- Diversity of colors.
- Fashion sport and classic tints.
- For full and gradient, double-gradients.
- Exceptional stability, targeted for high performance.



## Coloring

- Fast coloring.
- Uniform coloring.
- Excellent dispersing power.



## Baths

- Reproducibility from one bath to another.
- Long lasting.



## Resistance

- Heat resistance.
- Fastness to light.

# QUALITY

## Lenses durability

Analyzes were carried out on lenses tinted by an independent laboratory:



TEST RR02 : RESISTANCE A LA LUMIERE 50H										
Ce test est réalisé suivant les indications des §6.6 du Cahier des Charges 0.1										
N° échantillon:	Niveau d'altération de l'échelle des gris							CONFORME		
	Pas de différence			Différence importante				Niveau 1 (haut)	Niveau 2 (moyen)	Niveau 3 (bas)
	5	4,5	4	3,5	3	2,5	2	1,5	1	
1-2597	X								X	

Le résultat du test RR02 est CONFORME Niveau 1 (haut)


TEST ETUVE : VIEILLISSEMENT CHALEUR SECHE	
Ce test a été mis en place pour le client : exposition à 100°C en ambiance sèche pendant 3 heures	
N° échantillon:	Remarques
2-2597	Aucune remarque ; aucun changement

## Lots reproducibility

The reproducibility and compliance of each batch of coloring powders is ensured by spectrophotometry control.

### spectrophotometer



 The dyeing powder, which is sensitive to humidity, can take on a more or less dark appearance from one batch to the next. Its dyeing properties are not affected.

# ECO-FRIENDLY

**CRX\_Adv dyeing powders are designed to meet the needs of today's environmentally aware consumers.**



## No solvents

- Safe for the user.
- Easily treatable wastewater.



## Packaging

- Minimalist.
- Ecological.
- Economic.



## Storage

- Stable storage.
- Space-saving storage.



**CSR Report 2025**



# RESPONSIBLE PRODUCTS: COMPLIANCE & COMMITMENTS

## Dyeing powder CRX\_Adv

**Techniques Chimiques Nouvelles** is committed to providing products that are safe for users' health and aligned with best practices in sustainability.



### SUBSTANCES OF CONCERN

**FREE FROM SUBSTANCES CLASSIFIED AS CMR, SVHC, ED, PBT/VPVB, AND PMT/VPVM.**

CRX\_Adv dyeing powders do not contain any substances classified as **CMR** (Category 1A/1B), **SVHC**, recognized **endocrine disruptors**, or **PBT/vPvB** substances.

They comply with the requirements of the **REACH** regulation and do not include any restricted or prohibited substances according to current regulatory lists, including **PMT** and **vPvM** substances.



### OEKO-TEX® STANDARD 100

**COMPLIANT WITH THE OEKO-TEX® STANDARD 100 REGULATION**

To the best of our knowledge, we guarantee that the **CRX\_Adv dyeing powders** we supply comply with the requirements of the **Oeko-Tex® Standard 100, 2023 edition, Appendices 4 and 5**.

However, a dye in itself cannot be certified under the **Oeko-Tex® Standard 100**; certification applies only once the dye has been applied to a material. It is therefore your responsibility to validate these elements on the finished product through an accredited body, depending on the intended application and in accordance with the relevant technical datasheets.

Residues present on your material will naturally depend on the preparation, dyeing protocol, and post-treatment processes. The level of residues will vary according to your product's labeling.

That being said, our dyes do not contain any **harmful substances** as identified by the Oeko-Tex® Standard, when used under the intended conditions.



### ISO 14001 : 2015

**OUR ENVIRONMENTAL MANAGEMENT SYSTEM IS CERTIFIED**

We have implemented an environmental management system in accordance with the **ISO 14001:2015** standard, reflecting our commitment to reducing our **environmental impact** and continuously improving our environmental practices.



### RESPONSIBLE CARE®

**VOLUNTARY COMMITMENT TO SAFETY, HEALTH, AND THE ENVIRONMENT**

As a signatory of the **Responsible Care® charter**, we implement rigorous practices to ensure user safety and health, as well as environmental protection at every stage of the manufacturing, distribution, and use of our products.



ISO 9001:2015  
ISO 14001:2015  
Management  
System

www.tuv.com  
ID 9000027132



Produit en  
France  
à partir de  
matières  
premières  
françaises







# 01

## **COLORATION OF ORGANIC LENSES - CR39® STANDARD INDEX 1.50**

Dyeing powders  
CRX\_Advance

Also, suitable for lenses coated with a  
tintable top coat (coated polycarbonate,  
coated high-index, index 1.50 bio-based  
monomer...).

# DESCRIPTION

## Dyeing powders CRX\_Advance

CRX\_Adv dyeing powders are specially designed for dyeing CR39® organic lens with a index 1.50.

CRX\_Adv range is a reformulated version of our traditional CRX range. It offers a wide range of colors with bright tones. It allows the creation of solid or gradient shades, bright or neutral tones, and personalized shades. The stability of CRX\_Adv dyeing coloring baths is unmatched.



Our products allow you to prepare dyeing baths, which when heated, will give you a fast, stable and uniform color.



# Packaging

We understand that the needs of opticians, surfacing laboratories and lenses manufacturers vary. **That's why we offer the right coloring processes for every activity.**

For each material, we supply specific products as well as the necessary dyeing aids to ensure optimal results.

**The product is non-hazardous in terms of ADR IMDG IATA transport.**

## Available in bulk :



500 g box

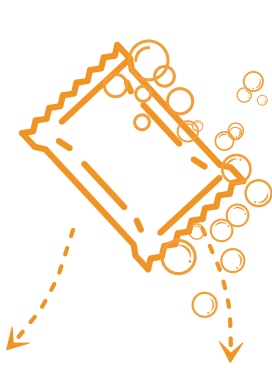


5 kg pail



10 kg pail

## Available in water-soluble bags form and pills form :



**1 small bag (10g)  
for 1L tank**



**1 big bag (50g)  
for 5L tank**



**2 pills (5g x 2)  
for 1L tank**



## BENEFITS



### Ease to use

- Pre-dosed products.
- No weighting require proper to use.



### Safety

- Safe to use.
- Neutral in the dyeing bath

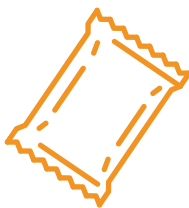
## External packaging :



**Plastic box**



**10g bag  
x25**



**50g bag  
x10**



**5g pills  
x50**



### **Cost-effective**

- No packaging.
- Optimizes storage and transport.

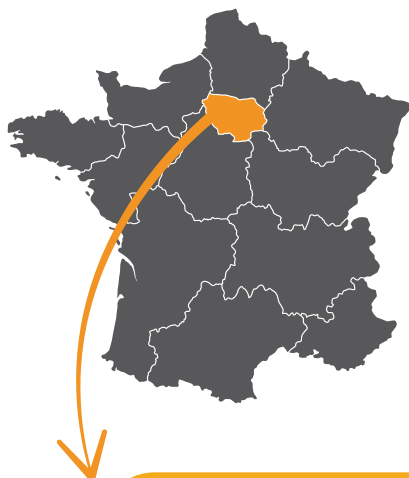


### **Environnement respect**

- Minimalist.
- Ecological.
- Economic.

# Our packaging machines

TCN has full control over its entire production, packaging, and shipping chain, enabling fast and flexible supply solutions.



## PRODUCTION WORKSHOP



TCN COMPRESSOR



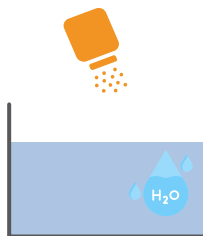
TCN BAGGING MACHINE



# The process

## 1 Prepare the dyeing bath

By diluting 10g CRX\_Adv dyeing powders per 1L of deionized water.



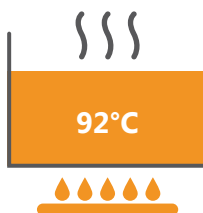
→ 1 big water-soluble bag (50g) per 5L tank.

→ 1 small water-soluble bag (10g) per 1L tank.

→ 2 pills (2x5g) per 1L tank.

## 2 Heat to 92°C (+/- 2°C)

Stir mechanically and let stabilize for a few minutes before use.



## 3 Prepare the CR39® lenses to be dyed

By dipping them a few minutes to be dyed at 92°C in discolorant 4080 (see page 33)  
Rinse with water.



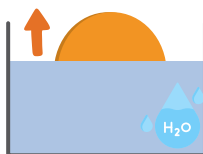
## 4 Dip the lenses for 3 to 30 minutes

Depending on the desired intensity.

*A slow and regular stirring is required through the dyeing process.*

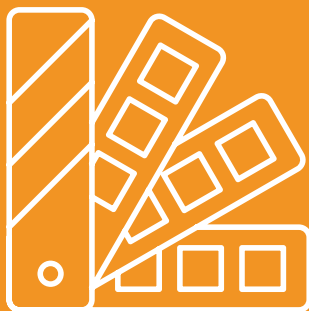


## 5 Rinse immediately with warm water

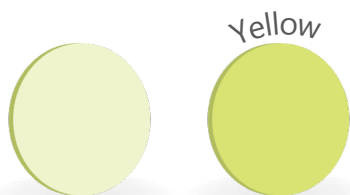


## COLOR CHART

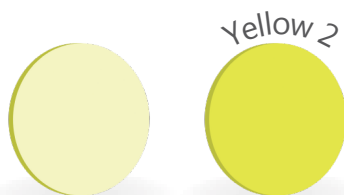
The perception of the colors presented in this color chart may vary from the actual hues.



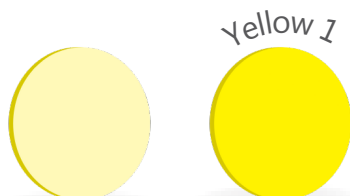
# From yellow to red...



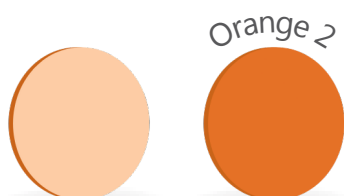
**CRX\_Adv 9150  
FLUO YELLOW**



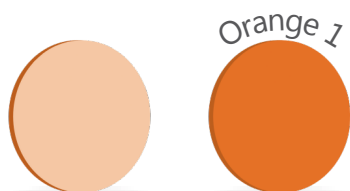
**CRX\_Adv 9151  
LEMON**



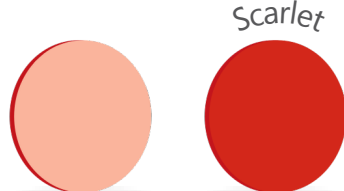
**CRX\_Adv 9152  
GOLD YELLOW**



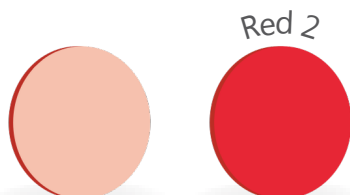
**CRX\_Adv 9154  
PURE ORANGE**



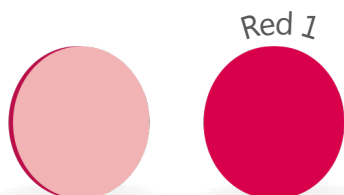
**CRX\_Adv 9153  
ORANGE**



**CRX\_Adv 9155  
SCARLET**

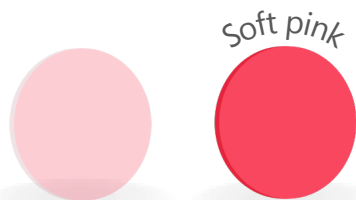


**CRX\_Adv 9157  
RED**

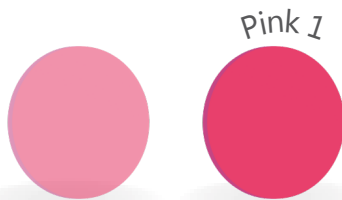


**CRX\_Adv 9156  
CHERRY**

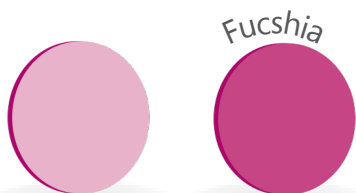
# From pink to blueberry...



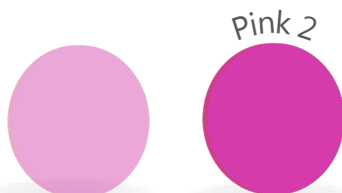
**CRX\_Adv 9170  
DRAGEE**



**CRX\_Adv 9158  
PINK**



**CRX\_Adv 9159  
FUCHSIA**



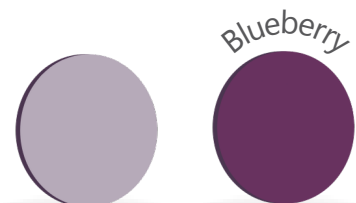
**CRX\_Adv 9195  
CYCLAMEN**



**CRX\_Adv 9160  
VIOLET**



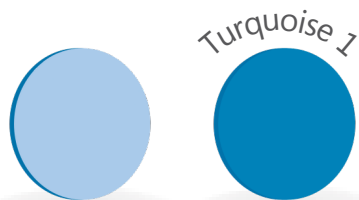
**CRX\_Adv 9171  
GRAPE**



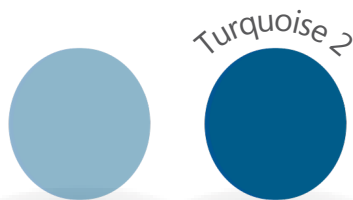
**CRX\_Adv 9172  
BLUEBERRY**



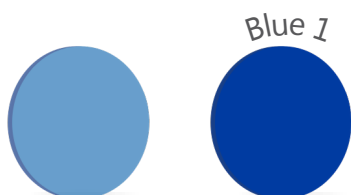
# From blue to navy...



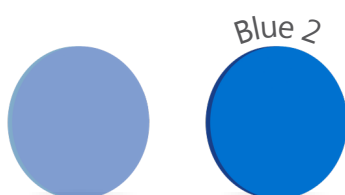
**CRX\_Adv 9173**  
**LAGON**



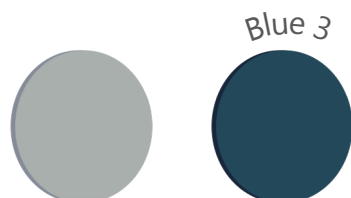
**CRX\_Adv 9198**  
**HORIZON**



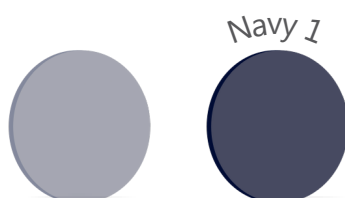
**CRX\_Adv 9162**  
**COBALT**



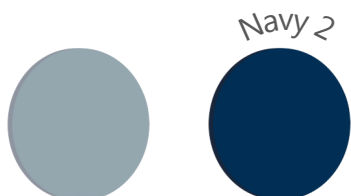
**CRX\_Adv 9161**  
**BLUE**



**CRX\_Adv 9196**  
**GREY BLUE**



**CRX\_Adv 9174**  
**NIGHT**

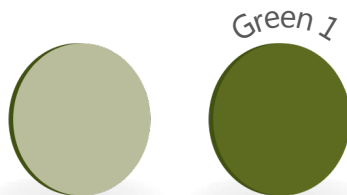


**CRX\_Adv 9175**  
**PETROLEUM**

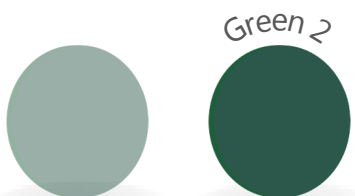
# From green to khaki...



**CRX\_Adv 9176  
ANIS**



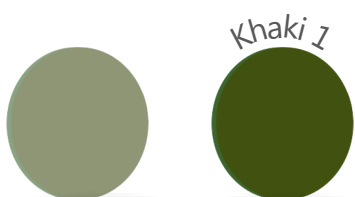
**CRX\_Adv 9177  
OLIVE**



**CRX\_Adv 9178  
FIR TREE**



**CRX\_Adv 9179  
MINT**



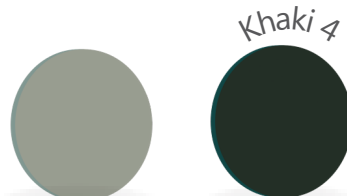
**CRX\_Adv 9180  
KHAKE**



**CRX\_Adv 9181  
LICHEN**



**CRX\_Adv 9182  
BOTTLE**

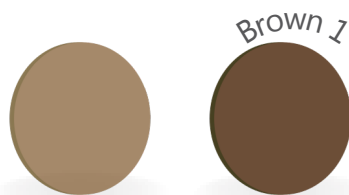


**CRX\_Adv 9183  
GREY GREEN**

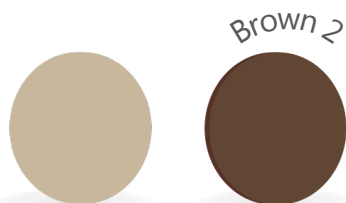
# Brown...



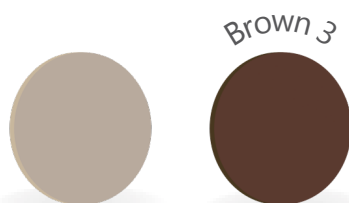
**CRX\_Adv 9184**  
**CARAMEL**



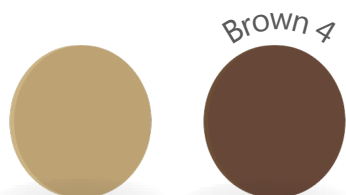
**CRX\_Adv 9185**  
**TABACCO**



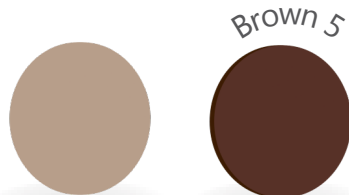
**CRX\_Adv 9186**  
**LICORICE**



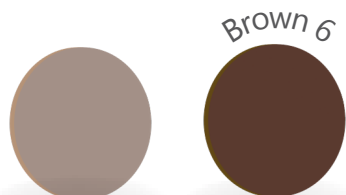
**CRX\_Adv 9187**  
**HAZELNUT**



**CRX\_Adv 9188**  
**NUT**



**CRX\_Adv 9189**  
**MAHOGANY**

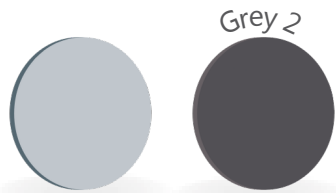


**CRX\_Adv 9197**  
**COFFEE**

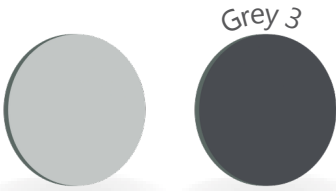
# From grey to black...



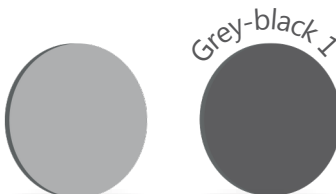
**CRX\_Adv 9190  
AMETHYST**



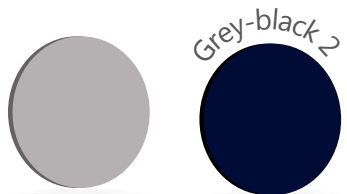
**CRX\_Adv 9191  
PEARL**



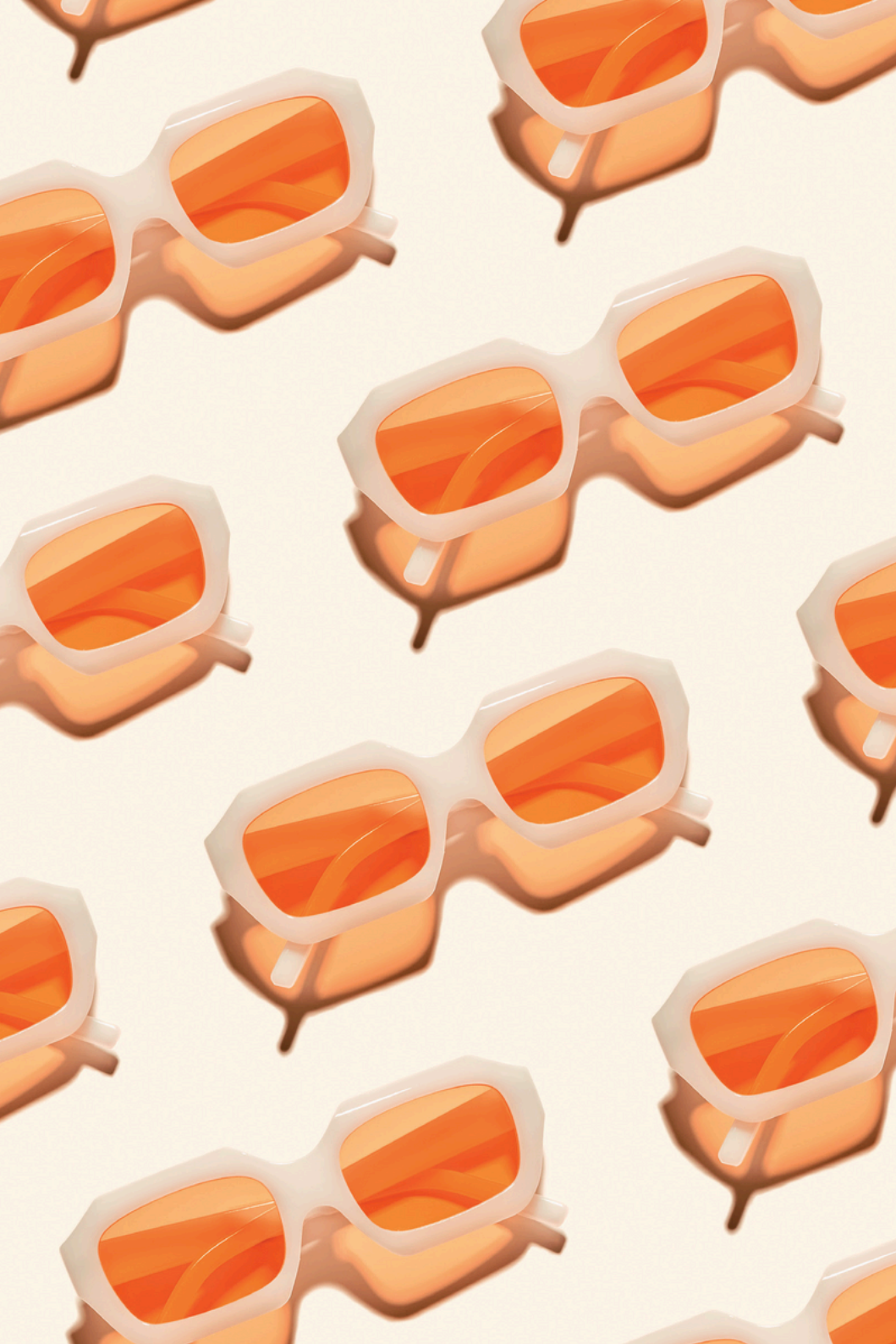
**CRX\_Adv 9192  
MOUSE GREY**



**CRX\_Adv 9193  
CONCRETE**



**CRX\_Adv 9194  
STEEL**

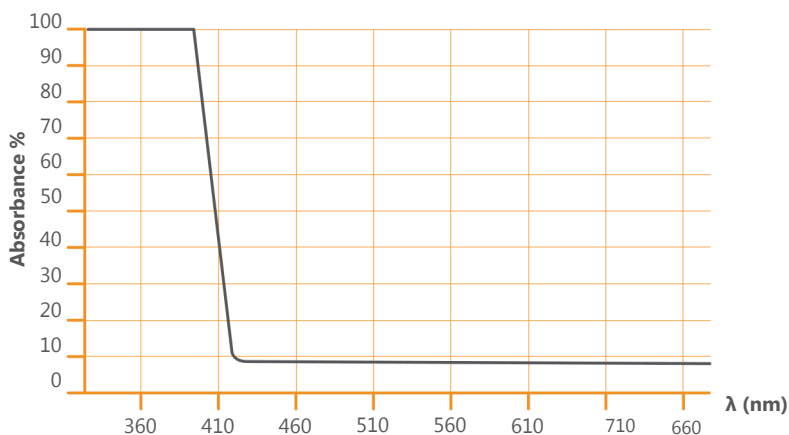
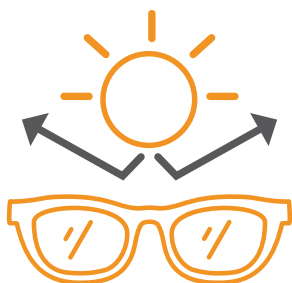


## RELATED PRODUCTS

### Anti-UV 5502P

The 5502P anti-UV allows the filtration of ultraviolet rays in the 350-400 nanometer frequency band of CR39® lenses.

Used at 35 g/L in deionized water at 92 °C for 5–10 minutes, the anti-UV 5502P provides total UV protection of the lenses.




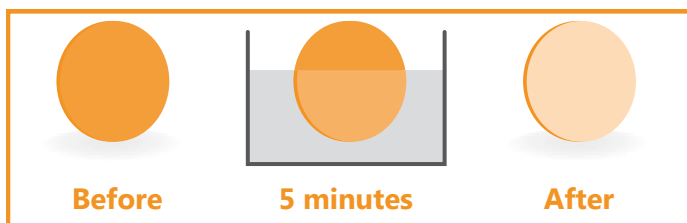
## Discolorant 4080

Pure 4080 discolorant is used to remove coloration of non-compliant tinted lenses.

A dip for a few minutes in a bath of 4080 discolorant at 92°C lowers the color.



 *Tip: the 4080 discolorant, used as a pre-treatment before staining, promotes even staining.*



## Transfer fluid 5880

The 5880 transfer is a non-volatile heating liquid for thermostatic baths.



Other auxiliaries complete our range:

Tank cleaners, preparators, etc.

**Do not hesitate to contact us for more products!**

## FAQ

### **The shade obtained is not homogeneous, what should I do?**

Slow agitation of the baths is essential throughout the duration of the coloring. Immersing the glasses already at bath temperature optimizes the process.

### **Are there disparities in tints from one lens to another, for lenses from the same bath?**

Dyes cannot fully compensate for irregularities between two materials. Pre-soaking in a bath of discolorant 4080 prepares the surface to be dyed and reduces inhomogeneities.

### **How long can I keep the baths?**

The baths have unparalleled stability. A duration of about 1 week is recommended, depending on use.

### **How many lenses can I dye with 1 kg?**

10.000 to 50.000 glasses.

### **Is the tint stable to hardened?**

There is no bleeding of the stain in the hard-coat, the dyes are stable in dry heat.

### **What to do with used dye baths?**

The baths are evacuated and treated as non-hazardous waste. Refer to the legislation in force.



PANT  
2635

PANT  
7436

PANTONE  
7646 C

PAN  
264

PAN  
743

PANTONE  
7647 C

PANTON  
244 C

PA  
26

PA  
74

PANTON  
7648 C

PANTO  
245 C

PAN  
501

PA  
49

PA  
579





# 02

## **COLORATION OF HIGH-INDEX LENSES**

### Catalyst 9219 Hi

High-index lenses (SPF 1.60: thin lenses, SPF 1.67: very thin lenses, index 1.74: ultra-thin lenses) are thinned lenses intended for large corrections. As strong as standard organic lenses, they reduce eye distortion. They are an aesthetic option with strong prescriptions.

# DESCRIPTION

## Catalyst 9219 Hi

Catalyst 9219 Hi is specifically formulated for coloring 1.60 and 1.67 high-index lenses.

High-index lenses have distinct characteristics compared to standard organic lenses. Catalyst 9219 Hi enhances the process, allowing for a gradual color development and facilitating the penetration of CRX\_Adv dyes.

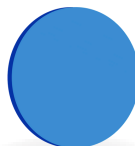


### Comparison of transmission after a 15 minutes dip

Without addition of  
catalyst 9219 Hi  
**T=55%**



In addition at 5 ml/L  
of catalyst 9219 Hi  
**T=25%**



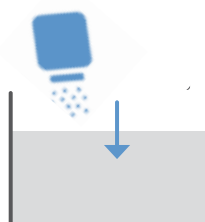
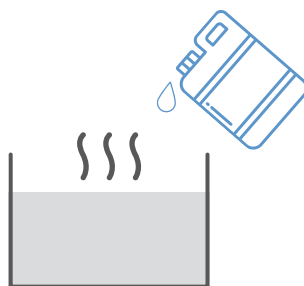
**On MR 8 Lenses**

# The process

## 1 Prepare the dyeing bath

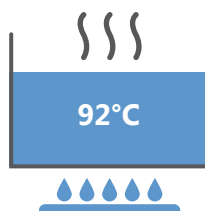
By diluting 5ml/L of catalyst 9219 Hi with deionized water. Stir well.

Dilute 10g/L of CRX\_Adv dyeing powders. Stir well.



## 2 Heat to 92°C (+/- 2°C)

Stir mechanically and let stabilize for a few minutes before using.



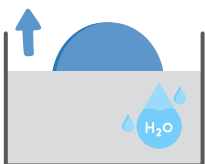
## 3 Dip the lenses for 3 to 30 minutes.

Depending on the desired intensity.

A slow and regular sharing is required through the dyeing process.



## 4 Rinse immediately with warm water.





# BENEFITS

**Catalyst 9219 Hi is extremely concentrated and no toxic: a small amount is enough to deliver an impact in the result.**



Time  
saver



Minimal  
dose



Ensures high index  
lens retains its  
shape



Odorless

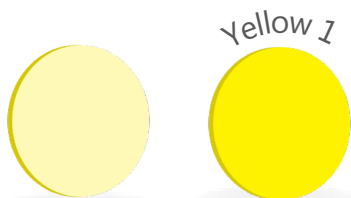


No toxic

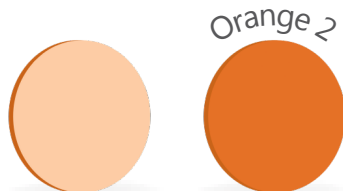
 *The final color obtained on high-index lenses is close to that of lenses thieves.*

*Due to the large variations between lenses less with the same index, it is impossible to product the final result with, certainly.*

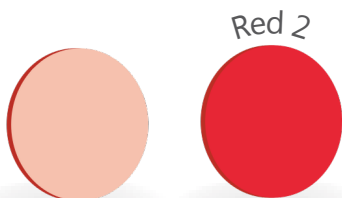
## From the CRX\_Adv range...



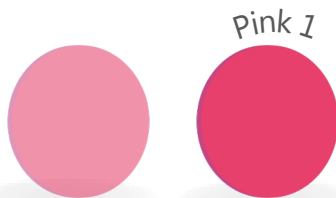
**CRX\_Adv 9152**  
**GOLD YELLOW**



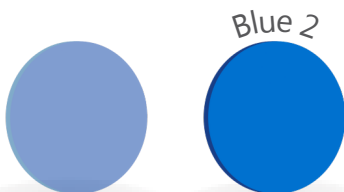
**CRX\_Adv 9154**  
**PURE ORANGE**



**CRX\_Adv 9157**  
**RED**



**CRX\_Adv 9158**  
**PINK**



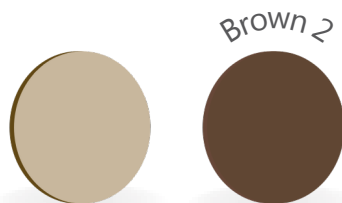
**CRX\_Adv 9161**  
**BLUE**



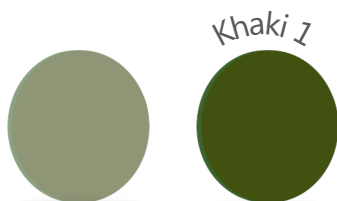
## From the CRX\_Adv range...



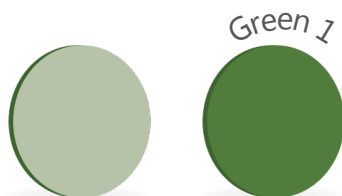
**CRX\_Adv 9184**  
**CARAMEL**



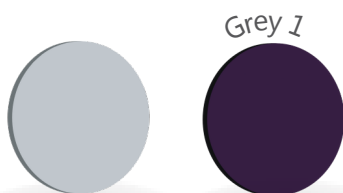
**CRX\_Adv 9186**  
**LICORICE**



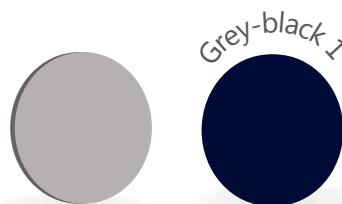
**CRX\_Adv 9180**  
**KHAKI**



**CRX\_Adv 9177**  
**OLIVE**



**CRX\_Adv 9190**  
**AMETHYST**



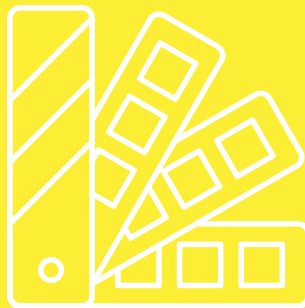
**CRX\_Adv 9194**  
**STEEL**





## COLOR CHART

**Therapeutic tints are specifically designed for enhancing visual comfort.**

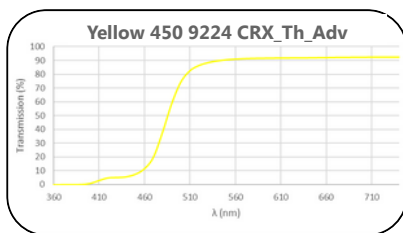




**YELLOW**

—

9224  
CRX\_Th\_Adv



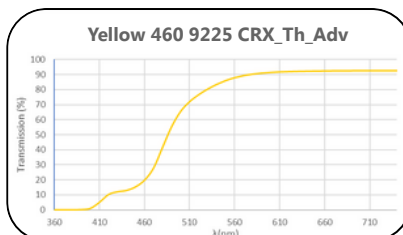
TRANSMISSION: 62%



**YELLOW**

—

9225  
CRX\_Th\_Adv



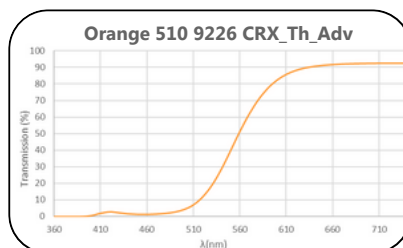
TRANSMISSION: 62%



**ORANGE**

—

9226  
CRX\_Th\_Adv



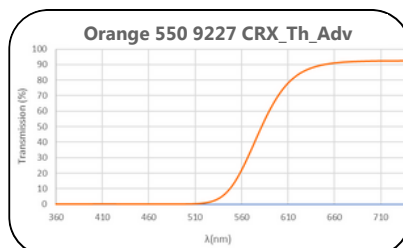
TRANSMISSION: 33%



**ORANGE**

—

9227  
CRX\_Th\_Adv



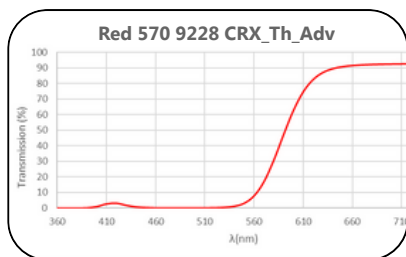
TRANSMISSION: 24%



**RED**

—

9228  
CRX\_Th\_Adv



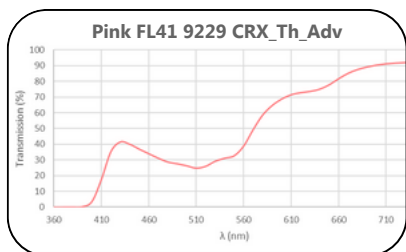
TRANSMISSION: 20%



**PINK**

—

9229  
CRX\_Th\_Adv



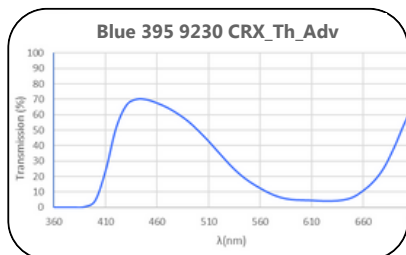
TRANSMISSION: 44%



**BLUE**

—

9230  
CRX\_Th\_Adv



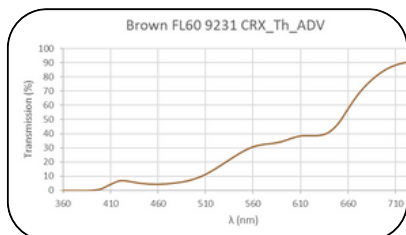
TRANSMISSION: 62%



**BROWN**

—

9231  
CRX\_Th\_Adv



TRANSMISSION: 20%









# 04

## **COLORATION OF UNCOATED POLYCARBONATE LENSES**

1. Liquid dyes PCL3
2. Powder dyes PCX

Polycarbonate lenses, stronger than standard organic lenses, are known for their durability and lightness. Used in various fields for many years, they have become a reliable and robust alternative, especially for frames that require impact-resistant or drilled lenses.

Their lightweight nature ensures everyday comfort, while their strength makes them ideal for active individuals, athletes, or children who are often exposed to extreme conditions or frequent handling. Additionally, they provide effective protection against sunlight, making them a recommended option for children's glasses as well as for specific uses.

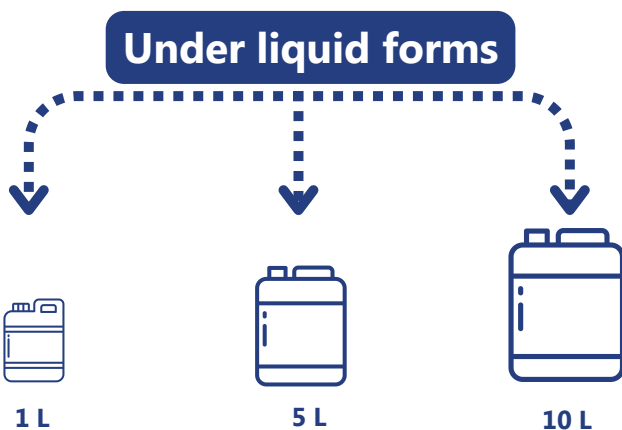
# DESCRIPTION

## Liquid dyes PCL3

PCL3 concentrated liquid dyes are suitable for tinting uncoated polycarbonate material.

They are mainly used for sports and safety eyewear, screens and visors.

## Packaging :



## BENEFITS



### Ease to use

- Pre-dosed products.
- No weighting require proper to use.

### Colors

- Diversity of colors.
- Bright fashion.

### No pretreatment

- No additional products.

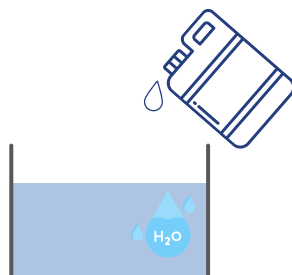


# The process

## 1 Prepare the dyeing bath

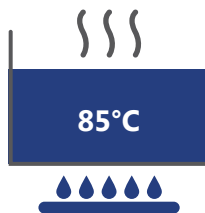
Prepare a dyeing bath by diluting PCL3 liquid dyes with deionized water. Heat it up.

→ 1 volume PCL3 liquid dyes per 9 volume water at a temperature of 85°C +/- 2°C.



## 2 Heat to 85°C (+/- 2°C)

Stir mechanically and let stabilize for a few minutes before use.



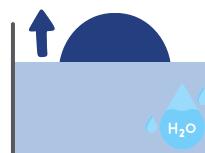
## 3 Dip the lenses for 2 to 20 minutes

Dip uncoated polycarbonate lenses in the dyeing bath during 2 to 20 minutes according to the required intensity.



A slow and regular stirring is required through the dyeing.

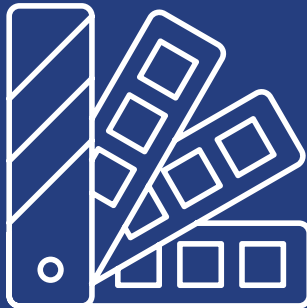
## 4 Rinse immediately with water



# Liquid dyes PCL3

## COLOR CHART

The perception of the colors presented in this color chart may vary from the actual hues.



# From yellow to pink...



**PCL3 3441  
YELLOW**



**PCL3 5945  
ORANGE**



**PCL3 3443B  
SCARLET**



**PCL3 8153B  
RED**



**PCL3 9041  
PURE  
RED**



**PCL3 9042  
CHERRY**



**PCL3 9111  
CYCLAMEN**



**PCL3 3442B  
PINK**

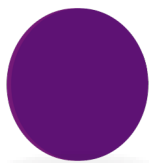


**PCL3 9110  
DRAGEE**

## From violet to blue...



**PCL3 3735**  
**VIOLET**



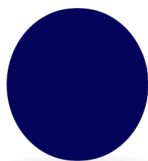
**PCL3 8169B**  
**EGG**  
**PLANT**



**PCL3 9045**  
**BLUE**

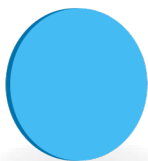


**PCL3 3437**  
**ROYAL**  
**BLUE**



**PCL3 3438**  
**NAVY**

## Turquoise...



**PCL3 9112**  
**SKY**

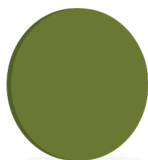


**PCL3 9046**  
**TURQUOISE**



**PCL3 9113**  
**LAGON**

## Khaki...



**PCL3 3450**  
**KHAKI**

## Brown...



**PCL3 3466**  
**PINK**  
**BROWN**



**PCL3 3446**  
**OLIVE**

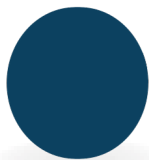


**PCL3 3447**  
**SMOKE**

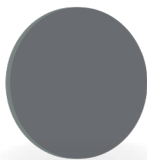


**PCL3 9033**  
**BROWN**

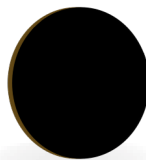
## Grey...



**PCL3 9063**  
**GREY BLUE**



**PCL3 3444B**  
**NEUTRAL**  
**GREY**



**PCL3 5894B**  
**BLACK**

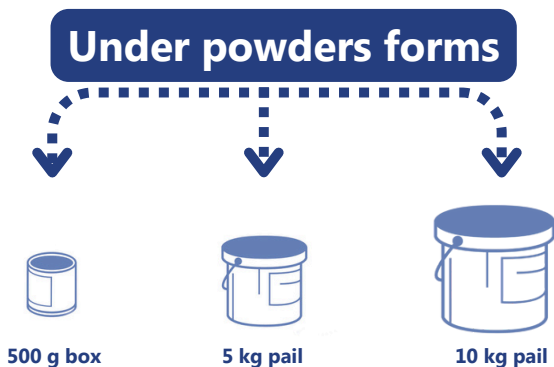


**PCL3 9026**  
**CONCRETE**

# DESCRIPTION

## Dyeing powder PCX

### Packaging :



Other auxiliaries complete our range: Tank cleaners, preparators, etc.

**Do not hesitate to contact us for more products!**

# BENEFITS



### Cost-effective

- No packaging.
- Optimizes storage and transport.

### Odorless

- No odors.

### Sustainable

- Minimalist.
- Ecological.
- Economic.



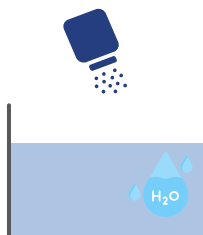


# The process

## 1 Prepare the dyeing bath

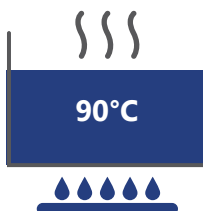
By diluting 25 g PCX dyeing powder per 1 L of deionized water.

→ 1 volume PCLX liquid dyes per 9 volume water at a temperature of 90°C +/- 2°C.



## 2 Heat to 90°C (+/- 2°C)

Stir mechanically and let stabilize for a few minutes before use.



## 3 Prepare the lenses to be dyed

By dipping them for 5 minutes in a 5g/L ultrasonic solution with a wetting agent 6883P.



## 4 Dip the lenses for 3 to 30 minutes

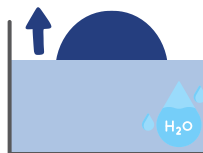
Depending on the desired intensity.



A slow and regular stirring is required through the dyeing process.



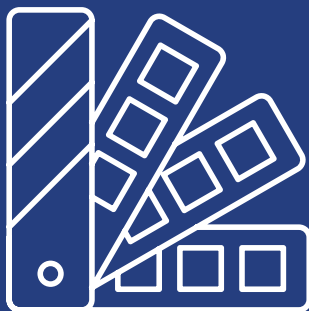
## 5 Rinse immediately with warm water



# **Powder dyes PCX**

## **COLOR CHART**

**The perception of the colors presented in this color chart may vary from the actual hues.**



## Basic shades



**PCX 9255**  
**GOLDE**  
**YELLOW**



**PCX 9256**  
**ORANGE**



**PCX 9258**  
**SCARLET**



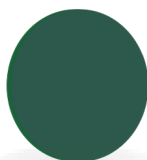
**PCX 9257**  
**RED**



**PCX 9261**  
**BLUE**



**PCX 9263**  
**NAVY**

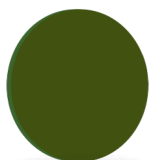


**PCX 9259**  
**GREEN**

## Classic shades



**PCX 9250**  
**GREEN**



**PCX 9248**  
**GREY**  
**GREEN**



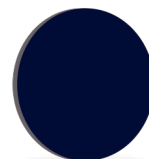
**PCX 9251**  
**CARAMEL**



**PCX 9249**  
**BROWN**



**PCX 9247**  
**BLUE GREY**



**PCX 9246**  
**NEUTRAL**  
**GREY**



# 05

## COLORATION OF POLYAMIDE & TRIVEX LENSES

Nylon, also known as polyamide, is a synthetic polymer that plays a significant role in the eyewear industry due to its distinctive properties. Nylon lenses are highly valued for their lightweight nature, exceptional durability, and resistance to impact and wear, making them a popular choice in glasses manufacturing.

One of their standout qualities is durability. These lenses are not only highly impact-resistant but also resistant to scratches, maintaining their clarity and integrity even in demanding or extreme environments an ideal solution for individuals who engage in frequent outdoor or physical activities.

Additionally, nylon lenses offer excellent light transmittance, ensuring clear and comfortable vision, which further enhances their appeal for both everyday use and specialized applications

Trivex is one of the most durable and high-performance materials on the market.

Comparable to polycarbonate in terms of weight, impact resistance and UV protection, it is distinguished by a higher Abbe value. This reduces chromatic aberrations and provides clearer, more precise vision, a major advantage for everyday visual comfort.

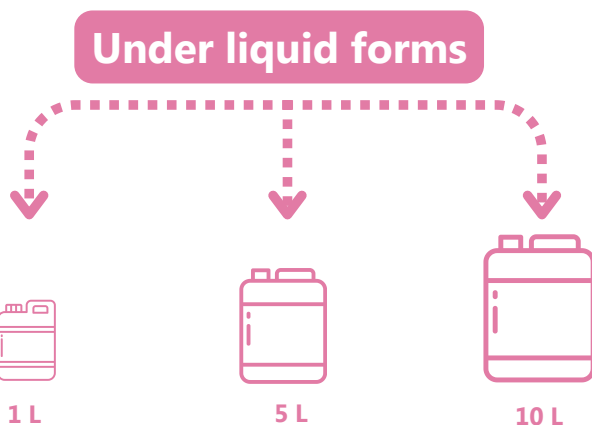
**A unique product for two materials with the same quality requirements.**

## DESCRIPTION

### Liquid dyes PAL2

Developed to meet industrial requirements, our PAL2 liquid dyes ensure an optimized dyeing process that is easy to integrate into your production lines. They offer stable and uniform coloring, with the discharge ability to easily create controlled gradients. Above all, the tinted lenses do not discharge, even during subsequent treatments such as coating, ensuring excellent tint retention and compliance with the strictest quality standards. PAL2 liquid dyes are polyvalent for polyamide or Trivex.

### Packaging :



## BENEFITS



**No discharge during  
subsequent treatments**

- No leakage or residue



# The process



## 1 Prepare the dyeing bath

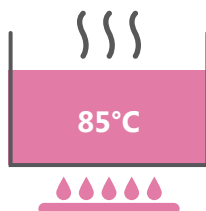
Prepare a dyeing bath by diluting PAL2 liquid dyes with deionized water.

→ 1 volume PAL2 liquid dyes per 9 volume water at temperature of 85°C +/- 2°C.



## 2 Heat to 85°C (+/- 2°C)

Stir mechanically and let stabilize for a few minutes before use.



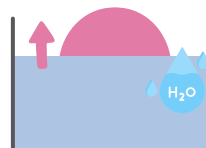
## 3 Dip the lenses for 2 to 20 minutes

Dip uncoated Polyamides or Trivex lenses in the dyeing bath during 2 to 20 minutes according to the required intensity.



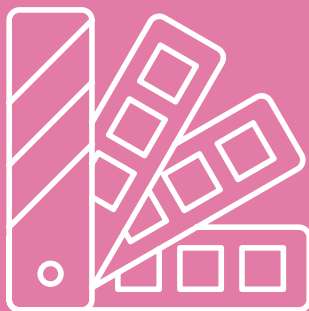
*A slow and regular stirring is required through the dyeing.*

## 4 Rinse immediately with water



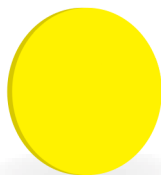
## COLOR CHART

The perception of the colors presented in this color chart may vary from the actual hues.

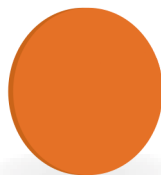




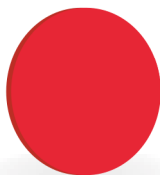
## From yellow to pink...



**9273 PAL2  
YELLOW**



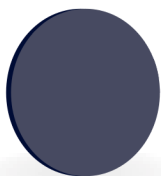
**9274 PAL2  
ORANGE**



**9275 PAL2  
RED**

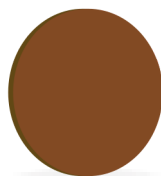


**9276 PAL2  
BLUE**

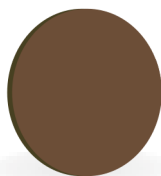


**9277 PAL2  
NAVY**

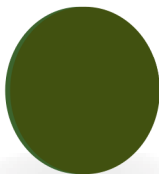
## Classic shades...



**9279 PAL2  
CARMEL**



**9280 PAL2  
BROWN**



**9281 PAL2  
KHAKI**



**9282 PAL2  
GREY BLUE**



**9283 PAL2  
NEUTRAL GREY**

# Principle of colors

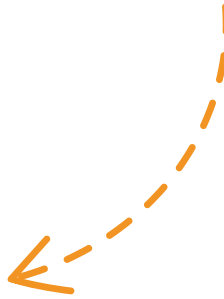
Our range allows for the creation of custom and unique colors.

Tinting is an intensive task that requires a balance of expertise, time, temperature and concentration of dyeing products.

See "The principle of color combination"



The principle of color combination



*TCN is able to match any color based on a provided reference.*

# SERVICES

To fully support our customers, we offer a comprehensive range of services tailored to their needs.

At the heart of our innovation strategy lies a strong commitment to technical R&D, with a clear focus on sustainable development. All development are carried out by TCN to ensure the most effective and reliable application solutions.

- COLOR MATCHING
- DYEING PRODUCTS
- PROCESS ADAPTATION SAMPLING

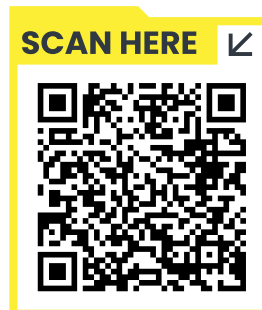
From the French market to international destinations, we support our clients with packaging solutions for their materials worldwide.

No matter where you are, our service team is here to help.

Colorful world with TCN !



 **SITE WEB**



 **FOLLOW US**



Techniques Chimiques Nouvelles

# A Colorful World

Please get in touch  
with us.

IMPRIM'VERT®

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**Website**

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ISO 14001:2015  
Management  
System

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