

HOW TO TINT LENSES

1

SHAKE
the BPI® red bottle
for 30 seconds or
The Pill® Open The Pill®
packaging with scissors.



2

EMPTY
the tint into a clean tank.
The Pill®: Drop The Pill®
into a clean tank.



3

RINSE
the remaining tint from
bottle three times.



4

FILL
the tanks to the
working level.



5

RAISE
the temperature to
60-70°C. (140-160°F)
Let stabilize for a
few minutes.



6

REMOVE
ALL lids from
ALL tanks



7

RAISE
the temperature to
93-96° C. (200-205°F).
Let stabilize for a
few minutes.



8

IMMERSE
the lenses s-l-o-w-l-y
and tint to the
required density



9

STIR OFTEN!
and when in doubt
always
check the
temperature!



1. 93-96°C (200-205°F) is the optimum tinting temperature. It allows the correct migration of the different size pigments that make up a typical BPI® tint. The lens material will not accept the tints correctly unless this temperature is maintained.

2. Some evaporation is typical and will not harm the tints. Just add more water and wait for the tint temperature to stabilize.

3. Lower the temperature to 82°C (180°F) and cover the tanks when not actively tinting. (Raise the temperature and remove the lids when you resume tinting).

4. Lens materials vary slightly which can affect results. (Manufacturer, composition, age, and/or coatings). This can be minimized or eliminated by using correct temperatures. If variances occur, refer to the BPI® Color Correction Chart.

5. Use a lab thermometer to verify the temperature. Tints will not boil if the temperature is measured correctly. Do not rely solely on the unit thermostat.

COLOR	IS TOO:	CORRECTION
ROSE LENS	Blue	Dip in: RED
ROSE LENS	Red	Dip in: VIOLET
ROSE LENS	Brown	Remove the color
GREEN LENS	Yellow	Dip in: BLUE
GREEN LENS	Blue	Dip in: BROWN or YELLOW
GREEN LENS	Brown	Dip in: BLUE
GREEN LENS	Gray	Remove the color
GRAY (HIGH INDEX) LENS	Blue	Dipping in yellow should make the lens turquoise.
GRAY LENS	Green	Dip in: PINK
GRAY LENS	Purple	Dip in: YELLOW
GRAY LENS	Blue	Dip in: BROWN
GRAY LENS	Brown	Check tint temperature, it could be too low.
GRAY LENS	Red	Dip in: BPI RED OUT™
BROWN LENS	Red	Dip in: GRAY or BLUE
BROWN LENS	Purple or Gray	Dip in: YELLOW
BROWN LENS	Green	Dip in: RED, then BLUE
BROWN LENS	Blue	Dip in: PINK, then YELLOW
BROWN LENS	Orange	Dip in: BLUE
BROWN LENS	Yellow	Dip in: BLUE and RED/PINK

TO MAKE:	DIP IN:	THEN:	AND/OR:
ORANGE	Red	Yellow	
COSMETAN	Brown	Gray	
TRUTONE	Gray	Green	Blue
G-31	Gray	Green	
PURPLE	Blue	Red	
AUTUMN BROWN	Gray	Brown	
WINTER GRAY	Gray	Blue	
VERMILLION	Red	Blue	Yellow
BURGUNDY	Orchid	Red	



Heat transfer fluid. The correct heating medium for lens tinting instruments

Some manufacturers are claiming that using water as a heat transfer medium is the best way to heat tints in a tinting system. This is not so, and needs to be addressed so that proper lens coloring can be achieved, and proper health and safety can be maintained in the optical laboratory. To be effective, the heat transfer fluid temperature should be higher than the tint solution inside the tint tank. Tests conducted at BPI® have shown that as the tint solution nears boiling, the temperature differential between the heating fluid and the tint tank should be optimized at near 40°F. (To maintain a 205°F tint tank). This differential requires the heat transfer solution to be maintained at about 245°F. This temperature differential cannot be achieved using water open to atmospheric pressure as a heat transfer medium. The maximum temperature of water at boil is 212°F (100°C), thus making it difficult to achieve the proper tint tank temperature to assure proper color, fade resistance, and color stability.