

# Converting Colors

CIELCh(42, 2.816, 11.016)

Have a look what the booklet for  
CIELCh(42, 2.816, 11.016) contains.

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# Color

**CIELCh(42, 2.522, 19.600)**

# Conversions

## Conversions Part 1

Format	Color
Hex	686262
RGB	104, 98, 98
RGB Percent	41%, 38%, 38%
CMY	0.5931, 0.6166, 0.6166
CMYK	0.00, 0.06, 0.06, 0.59
HSL	0°, 3%, 40%
HSV	0°, 6%, 41%
XYZ	12.2228, 12.5000, 13.2679
YIQ	99.7940, 3.5760, 1.2720

# Conversions

## Conversions Part 2

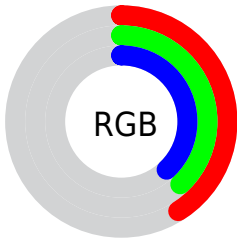
<b>Format</b>	<b>Color</b>
<b>RYB</b>	104, 98, 98
Decimal	6840930
CIELab	42.00, 2.38, 0.85
CIELCh	42, 2.522, 19.600
Yxy	12.5000, 0.3217, 0.3290
Android (android.graphics.Color)	4285031010 (0xFF686262)
YUV	99.7940, -0.8844, 3.6887
Hunter-Lab	35.3553, -0.1619, 2.4989

# Details

The CIELCh color  $42, 2.522, 19.600$  is a dark color, and the websafe version is hex  $666666$ . A complement of this color would be  $43, 2.437, 199.273$ , and the grayscale version is  $42, 0.006, 296.813$ .

A 20% lighter version of the original color is  $62, 2.332, 19.438$ , and  $22, 2.345, 19.776$  is the 20% darker color. If you saturate the color by 10%, you get  $39, 7.143, 20.392$ , and if you desaturate by 10%, it is  $45, 1.773, 199.418$ .

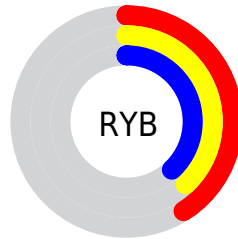
# Distribution



Red (41%)

Green (38%)

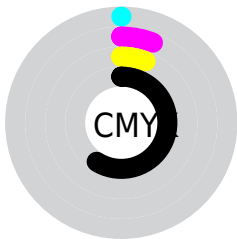
Blue (38%)



Red (41%)

Yellow (38%)

Blue (38%)

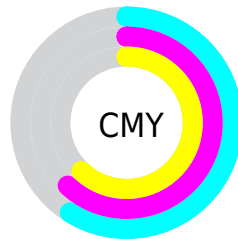


Cyan (0%)

Magenta (6%)

Yellow (6%)

Black (59%)



Cyan (59%)

Magenta (62%)

Yellow (62%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 42, 2.522, 19.600 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the CIELCh color 42, 2.522, 19.600 by changing the saturation by 10% instead.



 42, 2.522, 19.600	 42, 2.522, 19.600
 100, 2.522, 19.600	 32, 2.522, 19.600
 62, 2.522, 19.600	 22, 2.522, 19.600
 72, 2.522, 19.600	 12, 2.522, 19.600
 82, 2.522, 19.600	 2, 2.522, 19.600
 92, 2.522, 19.600	 0, 2.522, 19.600

 42, 2.522, 19.600	 42, 2.522, 19.600
 39, 7.143, 20.392	 45, 1.773, 199.418
 36, 12.105, 21.275	 49, 5.763, 198.856
 32, 17.400, 22.393	 52, 9.477, 198.487

■ 30, 22.989, 23.827

■ 55, 12.945,  
198.196

■ 27, 28.792, 25.669

■ 59, 16.194,  
197.960

■ 25, 34.681, 28.006

■ 23, 40.480, 30.880

■ 62, 19.251,  
197.765

■ 21, 45.816, 33.952

■ 66, 22.139,  
197.603

■ 20, 49.683, 35.651

■ 69, 24.878,  
197.467

■ 72, 27.487,  
197.351

# Harmonies

# Complementary

The Complementary color scheme is a pair of colors which are on the opposite of each other on the color wheel.



42, 2.522, 19.600



43, 2.437, 199.273

# Rectangle

The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



42, 2.522, 19.600



42, 2.522, 69.600



42, 2.522, 199.600



42, 2.522, 249.600

# Sweetspot

The Sweet Spot groups the original color and five complimentary colors.



42, 2.521, 19.626



56, 1.070, 19.161



42, 4.409, 324.702



29, 0.613, 19.116



79, 0.010, 296.813



29, 0.005, 296.813



# Same Dimension

The Same Dimension uses a secret algorithm to generate beautiful new colors.



42, 2.521, 19.626



53, 3.813, 19.740



43, 2.186, 74.659



20, 1.941, 19.734



22, 55.892, 37.358



51, 100.588, 40.002





# Inverse Universe

The Inverse Universe completely reimagines the original color for something new.



43, 2.437, 199.273



56, 3.655, 199.173



43, 2.165, 256.205



21, 1.862, 199.178



43, 27.785, 196.431



87, 48.184, 196.434



# Previews

## White Background



This preview shows how the CIELCh color 42, 2.522, 19.600 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

# Black Background



This preview shows how the CIE LCh color 42, 2.522, 19.600 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

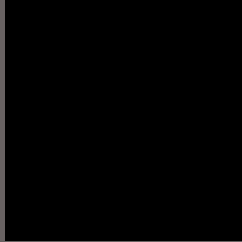
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

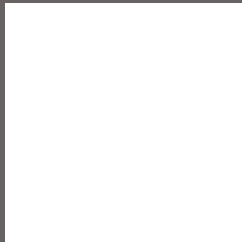
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 42, 2.522, 19.600**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 42, 2.522, 19.600.

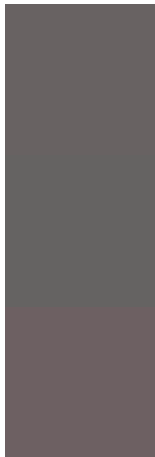


This preview shows how white text looks on a background with the CIELCh color 42, 2.522, 19.600.

# Color Blindness Simulation

Color vision deficiency is a very complex topic, and I could not describe the different causes any better than Wikipedia does, so if you want to learn more, you should check out their [article about color blindness](#).

## Dichromacy



### Original Color

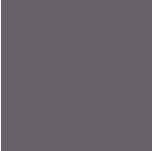
42, 2.522, 19.600

### Protanopia

42, 1.023, 55.188

### Deuteranopia

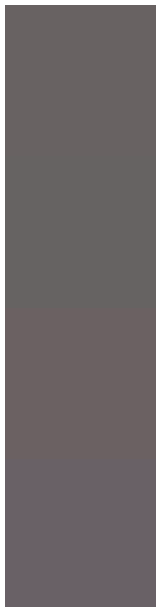
42, 5.639, 7.806



**Tritanopia**  
42, 5.390, 328.429



# Trichromacy



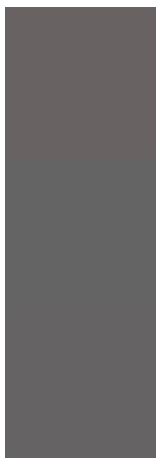
**Original Color**  
42, 2.522, 19.600

**Protanomaly**  
42, 1.386, 45.024

**Deuteranomaly**  
42, 4.269, 11.803

**Tritanomaly**  
42, 4.510, 337.959

# Monochromacy



**Original Color**  
42, 2.522, 19.600

**Achromatopsia**  
42, 0.006, 296.813

**Achromatomaly**  
42, 0.834, 19.115

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 42, 2.522, 19.600 is called "color". The color property can be set on classes, ids or directly on the HTML element.

This example shows how text in the color `rgb(104, 98, 98)` looks like.

```
.text, #text, p{  
    color:rgb(104, 98, 98)  
}
```

If you want to add a text shadow in that color use the text-shadow property, you can generate a text shadow directly with our [CSS Text Shadow Generator](#).

Here you see how black text with a 4 pixel rgb(104, 98, 98) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(104, 98, 98) }
```

## Border

The CSS property to change the border of an element to CIELCh 42, 2.522, 19.600 is called "border". The border property can be set on classes, ids or directly on the HTML element.

This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(104, 98, 98) }
```

If only the border color should be changed use the property border-color.

```
.border{ border-color:rgb(104, 98, 98) }
```

If you want to add a box shadow in that color use:

Here you see how a box with a 4 pixel rgb(104, 98, 98) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(104, 98, 98); -webkit-box-  
shadow:4px 4px 4px 4px rgb(104, 98, 98);  
box-shadow:4px 4px 4px 4px rgb(104, 98,  
98) }
```

# Background

The CSS property to change the background color of an element to CIELCh 42, 2.522, 19.600 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(104, 98, 98) }
```

If only the background color should be changed can be used:

```
.background{ background-color: rgb(104, 98,  
98) }
```

This example shows the color as background, it is applied via the CSS property "background".

To optimize and compress your CSS code, you can use our [online CSS compressor and optimizer](#) based on csstidy. If you want to create a linear or radial gradient as background or border, check our [CSS Gradient Generator](#).

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