

# Converting Colors

CIELCh(50, 1.433, 90.439)

Have a look what the booklet for  
CIELCh(50, 1.433, 90.439) contains.

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# Color

**CIELCh(50, 1.787, 96.790)**

# Conversions

## Conversions Part 1

Format	Color
Hex	787774
RGB	120, 119, 116
RGB Percent	47%, 47%, 45%
CMY	0.5298, 0.5337, 0.5454
CMYK	0.00, 0.01, 0.03, 0.53
HSL	45°, 2%, 46%
HSV	45°, 3%, 47%
XYZ	17.4674, 18.4187, 19.1311
YIQ	118.9570, 1.5590, -0.7210

# Conversions

## Conversions Part 2

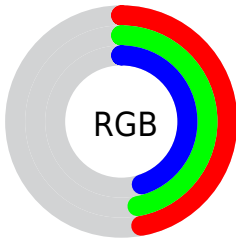
<b>Format</b>	<b>Color</b>
<b>RYB</b>	117, 120, 116
Decimal	7894900
CIELab	50.00, -0.21, 1.77
CIElCh	50, 1.787, 96.790
Yxy	18.4187, 0.3175, 0.3348
Android (android.graphics.Color)	4286084980 (0xFF787774)
YUV	118.9570, -1.4578, 0.9147
Hunter-Lab	42.9170, -2.4543, 3.6121

# Details

The CIELCh color  $50, 1.787, 96.790$  is a dark color, and the websafe version is hex  $666666$ . A complement of this color would be  $49, 1.804, 277.715$ , and the grayscale version is  $50, 0.007, 296.813$ .

A 20% lighter version of the original color is  $70, 1.670, 96.866$ , and  $30, 1.958, 96.608$  is the 20% darker color. If you saturate the color by 10%, you get  $49, 7.212, 95.747$ , and if you desaturate by 10%, it is  $51, 3.570, 278.030$ .

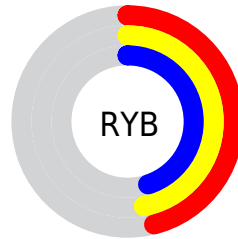
# Distribution



Red (47%)

Green (47%)

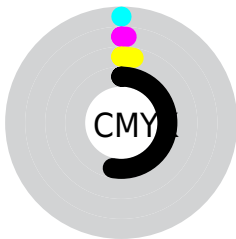
Blue (45%)



Red (46%)

Yellow (47%)

Blue (45%)

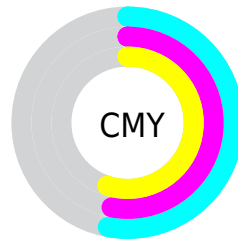


Cyan (0%)

Magenta (1%)

Yellow (3%)

Black (53%)



Cyan (53%)

Magenta (53%)

Yellow (55%)

# Brightness & Saturation Gradients

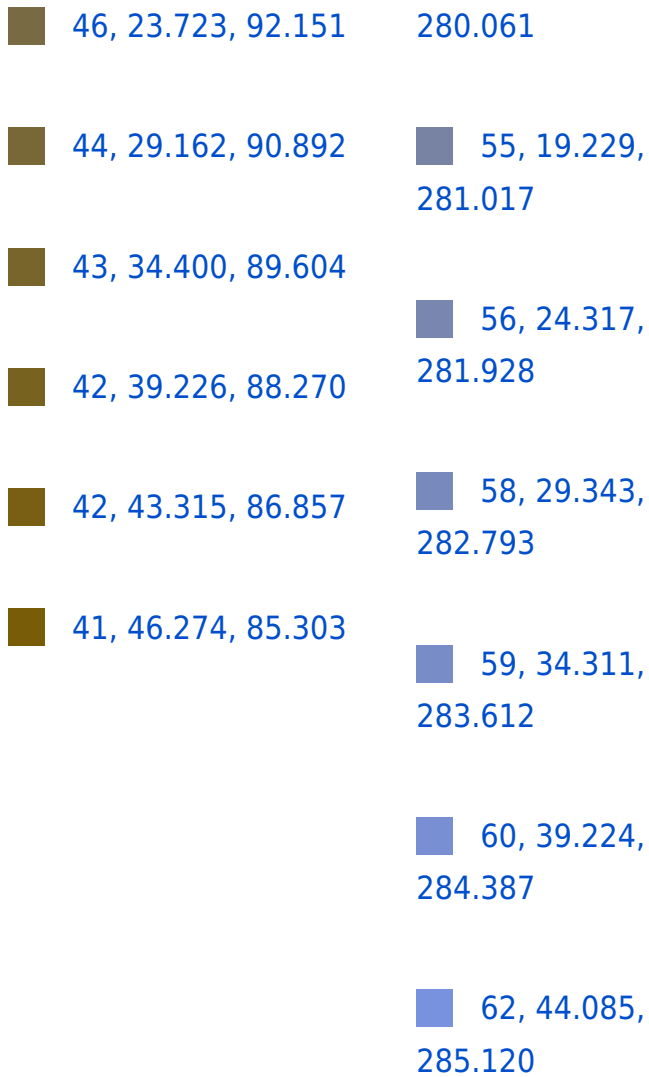
These gradients show how the CIELCh color 50, 1.787, 96.790 changes by changing the brightness by 10 percent. The first figure shows a shift by +10% for each color and the second figure -10%.

Similar to the brightness gradients but the following saturation gradients show a change of the CIELCh color 50, 1.787, 96.790 by changing the saturation by 10% instead.



 50, 1.787, 96.790	 50, 1.787, 96.790
 100, 1.787, 96.790	 40, 1.787, 96.790
 70, 1.787, 96.790	 30, 1.787, 96.790
 80, 1.787, 96.790	 20, 1.787, 96.790
 90, 1.787, 96.790	 10, 1.787, 96.790
	 0, 1.787, 96.790

 50, 1.787, 96.790	 50, 1.787, 96.790
 49, 7.212, 95.747	 51, 3.570, 278.030
 48, 12.693, 94.583	 52, 8.858, 279.060
 47, 18.210, 93.382	 54, 14.077,



# Harmonies

# Complementary

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



50, 1.787, 96.790



49, 1.804, 277.715

# Rectangle

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



50, 1.787, 96.790



50, 1.787, 146.790



50, 1.787, 276.790



50, 1.787, 326.790

# Sweetspot

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



50, 1.788, 96.828



64, 0.657, 96.921



49, 1.730, 359.614



34, 0.376, 96.911



83, 0.010, 296.813



34, 0.005, 296.813



# Same Dimension

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



50, 1.788, 96.828



64, 2.657, 96.756



50, 2.365, 119.723



26, 1.538, 96.712



42, 49.565, 84.206



80, 83.090, 83.027





# Inverse Universe

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



49, 1.804, 277.715



62, 2.678, 277.790



49, 2.392, 300.098



25, 1.550, 277.837



18, 62.983, 299.581



39, 111.552, 301.200



# Previews

## White Background



This preview shows how the CIELCh color 50, 1.787, 96.790 looks on a white background.

## Color Contrast Check

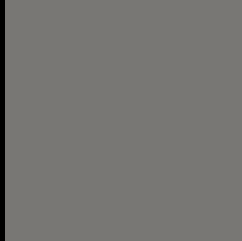
Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

# Black Background



This preview shows how the CIE LCh color 50, 1.787, 96.790 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

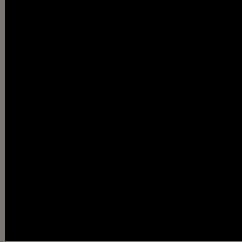
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

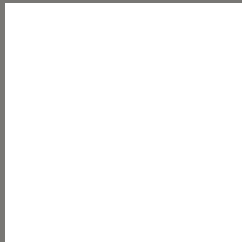
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 50, 1.787, 96.790**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 50, 1.787, 96.790.



This preview shows how white text looks on a background with the CIELCh color 50, 1.787, 96.790.

# 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

50, 1.787, 96.790

### Protanopia

50, 1.993, 55.156

### Deuteranopia

50, 6.682, 10.117



**Tritanopia**  
50, 6.207, 309.390



# Trichromacy



**Original Color**  
50, 1.787, 96.790

**Protanomaly**  
50, 1.677, 63.313

**Deuteranomaly**  
50, 4.540, 12.482

**Tritanomaly**  
50, 3.179, 312.610

# Monochromacy



**Original Color**  
50, 1.787, 96.790

**Achromatopsia**  
50, 0.007, 296.813

**Achromatomaly**  
50, 0.577, 110.026

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 50, 1.787, 96.790 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(120, 119, 116)` looks like.

```
.text, #text, p{  
    color:rgb(120, 119, 116)  
}
```

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(120, 119, 116) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(120, 119, 116) }
```

## Border

The CSS property to change the border of an element to CIELCh 50, 1.787, 96.790 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(120, 119, 116) }
```

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

```
.border{ border-color:rgb(120, 119, 116) }
```

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

Here you see how a box with a 4 pixel `rgb(120, 119, 116)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(120, 119, 116); -webkit-box-  
shadow:4px 4px 4px 4px rgb(120, 119, 116);  
box-shadow:4px 4px 4px 4px rgb(120, 119,  
116) }
```

# Background

The CSS property to change the background color of an element to CIELCh 50, 1.787, 96.790 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(120, 119, 116) }
```

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

```
.background{ background-color: rgb(120,  
119, 116) }
```

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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