

# Converting Colors

CIELCh(48, 4.550, 83.676)

Have a look what the booklet for  
CIELCh(48, 4.550, 83.676) contains.

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# Color

**CIELCh(48, 4.603, 82.603)**

# Conversions

## Conversions Part 1

Format	Color
Hex	76716A
RGB	118, 113, 106
RGB Percent	46%, 44%, 42%
CMY	0.5361, 0.5557, 0.5832
CMYK	0.00, 0.04, 0.10, 0.54
HSL	35°, 5%, 44%
HSV	35°, 10%, 46%
XYZ	16.0657, 16.7945, 16.1095
YIQ	113.6970, 5.2270, -1.1170

# Conversions

## Conversions Part 2

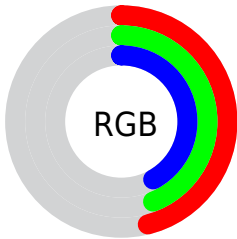
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	115, 118, 106
Decimal	7762282
CIE Lab	48.00, 0.59, 4.56
CIE LCh	48, 4.603, 82.603
Yxy	16.7945, 0.3281, 0.3430
Android (android.graphics.Color)	4285952362 (0xFF76716A)
YUV	113.6970, -3.7946, 3.7737
Hunter-Lab	40.9810, -1.7398, 5.3800

# Details

The CIELCh color  $48, 4.603, 82.603$  is a dark color, and the websafe version is hex  $666666$ . A complement of this color would be  $47, 4.556, 265.228$ , and the grayscale version is  $48, 0.006, 296.813$ .

A 20% lighter version of the original color is  $68, 4.785, 85.807$ , and  $28, 4.516, 78.382$  is the 20% darker color. If you saturate the color by 10%, you get  $46, 9.289, 81.402$ , and if you desaturate by 10%, it is  $50, 0.061, 80.503$ .

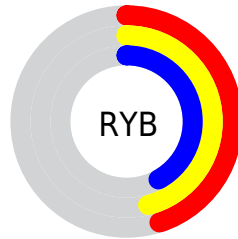
# Distribution



Red (46%)

Green (44%)

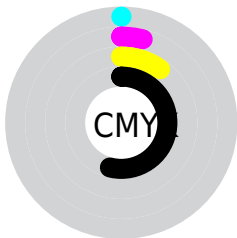
Blue (42%)



Red (45%)

Yellow (46%)

Blue (42%)

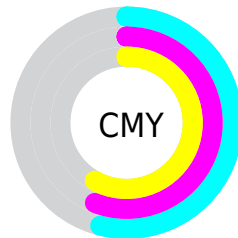


Cyan (0%)

Magenta (4%)

Yellow (10%)

Black (54%)



Cyan (54%)

Magenta (56%)

Yellow (58%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 48, 4.603, 82.603 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 48, 4.603, 82.603 by changing the saturation by 10% instead.



 48, 4.603, 82.603       48, 4.603, 82.603

 100, 4.603, 82.603       38, 4.603, 82.603

 68, 4.603, 82.603       28, 4.603, 82.603

 78, 4.603, 82.603       18, 4.603, 82.603

 88, 4.603, 82.603       8, 4.603, 82.603

 98, 4.603, 82.603       0, 4.603, 82.603

 48, 4.603, 82.603       48, 4.603, 82.603

 46, 9.289, 81.402       50, 0.061, 80.503

 45, 14.121, 80.136       51, 4.348, 265.084

 43, 19.094, 78.835       53, 8.633, 266.182

41, 24.182, 77.501

55, 12.806,  
267.251

40, 29.324, 76.122

57, 16.879,  
268.276

38, 34.396, 74.666

37, 39.161, 73.064

59, 20.860,  
269.256

36, 43.220, 71.174

60, 24.759,  
270.189

34, 46.943, 69.337

62, 28.584,  
271.076

64, 32.342,  
271.918

# Harmonies

# Complementary

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



48, 4.603, 82.603



47, 4.556, 265.228

# Rectangle

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



48, 4.603, 82.603



48, 4.603, 132.603



48, 4.603, 262.603



48, 4.603, 312.603

# Sweetspot

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



48, 4.604, 82.621



63, 1.657, 83.373



46, 5.774, 349.218



32, 1.251, 83.317



82, 0.010, 296.813



33, 0.005, 296.813



# Same Dimension

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



48, 4.604, 82.621



61, 6.744, 82.366



49, 7.020, 112.648



24, 2.531, 82.753



35, 48.116, 69.205



70, 81.924, 67.167





# Inverse Universe

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



47, 4.556, 265.228



59, 6.652, 265.521



45, 7.179, 294.316



23, 2.509, 265.081



23, 47.451, 289.672

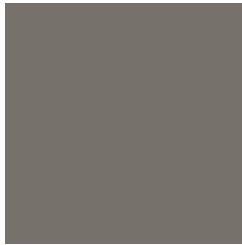


48, 85.207, 292.023



# Previews

## White Background



This preview shows how the CIELCh color 48, 4.603, 82.603 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 48, 4.603, 82.603 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

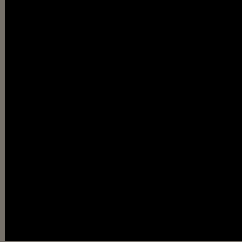
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

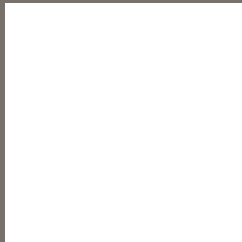
If you want to check with other color combinations, try the [Color Contrast Checker](#).

# CIELCh 48, 4.603, 82.603

## Background



This preview shows how black text looks on a background with the CIELCh color 48, 4.603, 82.603.



This preview shows how white text looks on a background with the CIELCh color 48, 4.603, 82.603.

# 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

48, 4.603, 82.603

### Protanopia

48, 4.603, 82.603

### Deuteranopia

48, 7.387, 33.911



**Tritanopia**  
48, 6.454, 324.806



# Trichromacy



## Original Color

48, 4.603, 82.603

## Protanomaly

48, 4.603, 82.603

## Deuteranomaly

48, 5.947, 43.134

## Tritanomaly

48, 3.368, 348.091

# Monochromacy



## Original Color

48, 4.603, 82.603

## Achromatopsia

48, 0.006, 296.813

## Achromatomaly

48, 1.933, 84.806

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 48, 4.603, 82.603 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(118, 113, 106)` looks like.

```
.text, #text, p{  
    color:rgb(118, 113, 106)  
}
```

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(118, 113, 106) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(118, 113, 106) }
```

## Border

The CSS property to change the border of an element to CIELCh 48, 4.603, 82.603 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(118, 113, 106) }
```

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

```
.border{ border-color:rgb(118, 113, 106) }
```

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

Here you see how a box with a 4 pixel `rgb(118, 113, 106)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(118, 113, 106); -webkit-box-  
shadow:4px 4px 4px 4px rgb(118, 113, 106);  
box-shadow:4px 4px 4px 4px rgb(118, 113,  
106) }
```

# Background

The CSS property to change the background color of an element to CIELCh 48, 4.603, 82.603 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(118, 113, 106) }
```

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

```
.background{ background-color: rgb(118,  
113, 106) }
```

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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