

# Converting Colors

CIELCh(68, 1.223, 87.215)

Have a look what the booklet for  
CIELCh(68, 1.223, 87.215) contains.

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# Color

**CIELCh(68, 1.680, 96.861)**

# Conversions

## Conversions Part 1

Format	Color
Hex	A7A6A3
RGB	167, 166, 163
RGB Percent	65%, 65%, 64%
CMY	0.3463, 0.3502, 0.3620
CMYK	0.00, 0.01, 0.02, 0.35
HSL	45°, 2%, 65%
HSV	45°, 2%, 65%
XYZ	36.0313, 37.9720, 39.9330
YIQ	165.9570, 1.5590, -0.7210

# Conversions

## Conversions Part 2

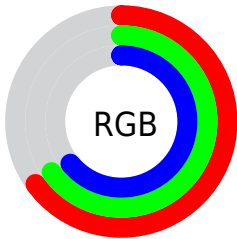
<b>Format</b>	<b>Color</b>
<b>RYB</b>	164, 167, 163
Decimal	10987171
CIELab	68.00, -0.20, 1.67
CIELCh	68, 1.680, 96.861
Yxy	37.9720, 0.3162, 0.3333
Android (android.graphics.Color)	4289177251 (0xFFA7A6A3)
YUV	165.9570, -1.4578, 0.9147
Hunter-Lab	61.6215, -3.4650, 4.7129

# Details

The CIELCh color  $68, 1.680, 96.861$  is a light color, and the websafe version is hex  $999999$ . A complement of this color would be  $67, 1.699, 277.653$ , and the grayscale version is  $68, 0.008, 296.813$ .

A 20% lighter version of the original color is  $88, 1.590, 96.896$ , and  $48, 1.801, 96.778$  is the 20% darker color. If you saturate the color by 10%, you get  $66, 8.778, 95.824$ , and if you desaturate by 10%, it is  $70, 5.325, 278.162$ .

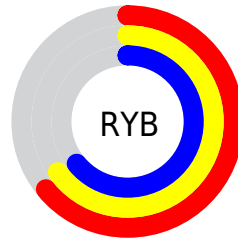
# Distribution



Red (65%)

Green (65%)

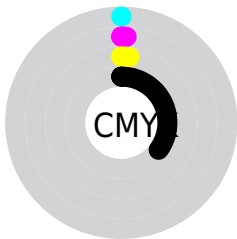
Blue (64%)



Red (64%)

Yellow (65%)

Blue (64%)

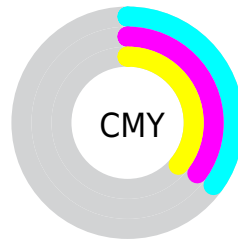


Cyan (0%)

Magenta (1%)

Yellow (2%)

Black (35%)



Cyan (35%)

Magenta (35%)

Yellow (36%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 68, 1.680, 96.861 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 68, 1.680, 96.861 by changing the saturation by 10% instead.



 68, 1.680, 96.861       68, 1.680, 96.861

 100, 1.680, 96.861       58, 1.680, 96.861

 88, 1.680, 96.861       48, 1.680, 96.861

 98, 1.680, 96.861       38, 1.680, 96.861

 28, 1.680, 96.861

 18, 1.680, 96.861

 8, 1.680, 96.861

 0, 1.680, 96.861

 68, 1.680, 96.861       68, 1.680, 96.861

 66, 8.778, 95.824       70, 5.325, 278.162

65, 15.952, 94.626

71, 12.239,  
279.222

64, 23.175, 93.389

73, 19.059,  
280.246

62, 30.394, 92.121

61, 37.506, 90.823

74, 25.789,  
281.222

59, 44.332, 89.493

76, 32.433,  
282.150

58, 50.566, 88.113

57, 55.739, 86.641

78, 35.009,  
281.223

56, 59.258, 84.998

79, 32.993,  
277.922

80, 31.097,  
274.234

81, 29.343,  
270.119

# Harmonies

# Complementary

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



68, 1.680, 96.861



67, 1.699, 277.653

# Rectangle

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



68, 1.680, 96.861



68, 1.680, 146.861



68, 1.680, 276.861



68, 1.680, 326.861

# Sweetspot

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



68, 1.681, 96.912



86, 0.861, 96.937



67, 1.627, 359.468



46, 0.493, 96.930



94, 0.011, 296.813



46, 0.006, 296.813



# Same Dimension

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



68, 1.681, 96.912



86, 2.607, 96.858



68, 2.225, 119.777



35, 1.603, 96.795



49, 55.943, 83.875



5, 6.814, 92.283





# Inverse Universe

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



67, 1.699, 277.653



85, 2.631, 277.710



67, 2.252, 300.043



35, 1.616, 277.776



22, 72.317, 300.096



1, 7.621, 279.519



# Previews

## White Background



This preview shows how the CIELCh color 68, 1.680, 96.861 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

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 68, 1.680, 96.861 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

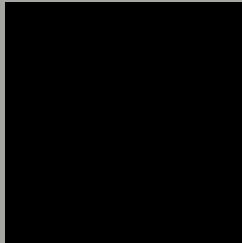
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

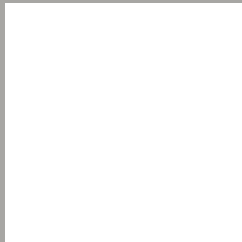
If you want to check with other color combinations, try the [Color Contrast Checker](#).

# CIELCh 68, 1.680, 96.861

## Background



This preview shows how black text looks on a background with the CIELCh color 68, 1.680, 96.861.

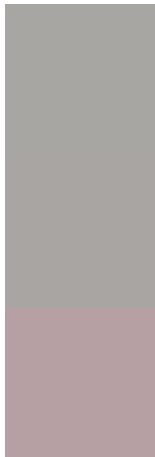


This preview shows how white text looks on a background with the CIELCh color 68, 1.680, 96.861.

# 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


68, 1.680, 96.861

### Protanopia

68, 2.235, 66.703

### Deuteranopia

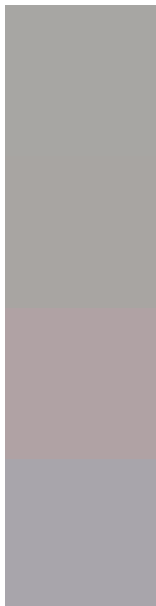
68, 8.780, 5.723



**Tritanopia**  
68, 6.897, 306.421



# Trichromacy



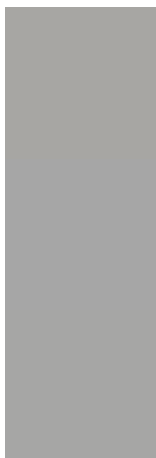
**Original Color**  
68, 1.680, 96.861

**Protanomaly**  
68, 1.994, 74.834

**Deuteranomaly**  
68, 5.496, 8.308

**Tritanomaly**  
68, 3.510, 309.189

# Monochromacy



**Original Color**  
68, 1.680, 96.861

**Achromatopsia**  
68, 0.008, 296.813

**Achromatomaly**  
68, 0.541, 110.018

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 68, 1.680, 96.861 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(167, 166, 163)` looks like.

```
.text, #text, p{  
    color:rgb(167, 166, 163)  
}
```

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(167, 166, 163) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(167, 166, 163) }
```

## Border

The CSS property to change the border of an element to CIELCh 68, 1.680, 96.861 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(167, 166, 163) }
```

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

```
.border{ border-color:rgb(167, 166, 163) }
```

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

Here you see how a box with a 4 pixel `rgb(167, 166, 163)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(167, 166, 163); -webkit-box-  
shadow:4px 4px 4px 4px rgb(167, 166, 163);  
box-shadow:4px 4px 4px 4px rgb(167, 166,  
163) }
```

# Background

The CSS property to change the background color of an element to CIELCh 68, 1.680, 96.861 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(167, 166, 163) }
```

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

```
.background{ background-color: rgb(167,  
166, 163) }
```

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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