

# Converting Colors

CIELCh(49, 20.589, 124.130)

Have a look what the booklet for  
CIELCh(49, 20.589, 124.130)  
contains.

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# Color

**CIELCh(49, 20.489, 123.473)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	6C7957
RGB	108, 121, 87
RGB Percent	42%, 47%, 34%
CMY	0.5760, 0.5250, 0.6583
CMYK	0.11, 0.00, 0.28, 0.52
HSL	83°, 16%, 41%
HSV	83°, 28%, 48%
XYZ	14.7797, 17.5941, 11.6611
YIQ	113.2370, 3.1660, -13.3300

# Conversions

## Conversions Part 2

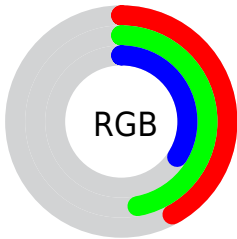
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	87, 121, 100
Decimal	7108951
CIE <sub>Lab</sub>	49.00, -11.30, 17.09
CIE <sub>LCh</sub>	49, 20.489, 123.473
Yxy	17.5941, 0.3356, 0.3995
Android (android.graphics.Color)	4285299031 (0xFF6C7957)
YUV	113.2370, -12.9348, -4.5928
Hunter-Lab	41.9453, -10.5087, 12.8786

# Details

The CIELCh color  $49, 20.489, 123.473$  is a dark color, and the websafe version is hex  $666633$ . A complement of this color would be  $39, 21.476, 306.397$ , and the grayscale version is  $48, 0.006, 296.813$ .

A 20% lighter version of the original color is  $69, 20.279, 122.997$ , and  $29, 20.323, 123.058$  is the 20% darker color. If you saturate the color by 10%, you get  $48, 27.640, 122.978$ , and if you desaturate by 10%, it is  $50, 13.224, 123.982$ .

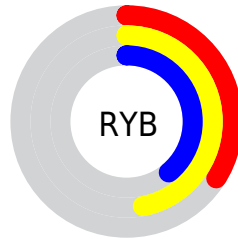
# Distribution



Red (42%)

Green (47%)

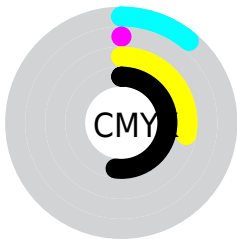
Blue (34%)



Red (34%)

Yellow (47%)

Blue (39%)

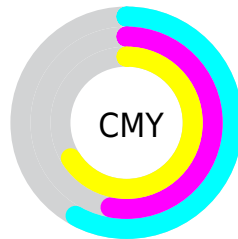


Cyan (11%)

Magenta (0%)

Yellow (28%)

Black (52%)



Cyan (58%)

Magenta (53%)

Yellow (66%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 49, 20.489, 123.473 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 49, 20.489, 123.473 by changing the saturation by 10% instead.



 49, 20.489,  
123.473

 49, 20.489,  
123.473


 100, 20.489,  
123.473

 39, 20.489,  
123.473

 69, 20.489,  
123.473

 29, 20.489,  
123.473

 79, 20.489,  
123.473

 19, 20.489,  
123.473

 89, 20.489,  
123.473

 9, 20.489, 123.473

 99, 20.489,  
123.473

 0, 20.489, 123.473

 49, 20.489,

 49, 20.489,

123.473

123.473

■ 48, 27.640,  
122.978

■ 50, 13.224,  
123.982

■ 48, 34.576,  
122.518

■ 50, 5.906, 124.483

■ 47, 41.161,  
122.141

■ 51, 1.415, 304.910

■ 52, 8.707, 305.389

■ 47, 47.195,  
121.912

■ 53, 15.945,  
305.809

■ 47, 52.416,  
121.922

■ 53, 23.111,  
306.195

■ 46, 56.528,  
122.277

■ 54, 30.194,  
306.549

■ 46, 59.630,  
122.924

■ 55, 37.182,  
306.873

■ 46, 60.232,  
123.030

■ 56, 44.071,



# Harmonies

# Complementary

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



49, 20.489, 123.473



39, 21.476, 306.397

# Rectangle

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



49, 20.489, 123.473



49, 20.489, 173.473



49, 20.489, 303.473



49, 20.489, 353.473

# Sweetspot

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



49, 20.490, 123.475



64, 7.277, 124.477



44, 12.242, 57.424



33, 5.144, 124.413



83, 0.010, 296.813



34, 0.005, 296.813





# Same Dimension

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



49, 20.490, 123.475



62, 30.757, 123.136



48, 23.434, 139.259



25, 4.156, 124.433



47, 61.611, 123.080



90, 104.394, 123.923



# Inverse Universe

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



39, 21.476, 306.397



48, 32.654, 306.834



41, 23.616, 322.017



24, 4.221, 305.299



16, 75.091, 309.912



37, 127.215, 309.361



# Previews

## White Background



This preview shows how the CIELCh color 49, 20.489, 123.473 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 CIELCh color 49, 20.489, 123.473 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

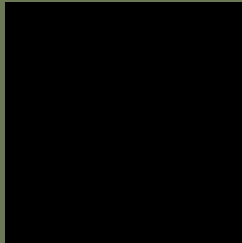
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

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

**CIELCh 49, 20.489, 123.473**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 49, 20.489, 123.473.



This preview shows how white text looks on a background with the CIELCh color 49, 20.489, 123.473.

# 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

49, 20.489, 123.473


### Protanopia

49, 18.495, 95.193

### Deuteranopia

49, 17.366, 70.158





**Tritanopia**  
49, 5.333, 282.478

# Trichromacy



**Original Color**  
49, 20.489, 123.473

**Protanomaly**  
49, 18.569, 106.320

**Deuteranomaly**  
49, 16.518, 90.848

**Tritanomaly**  
49, 4.794, 140.254

# Monochromacy



**Original Color**  
49, 20.489, 123.473

**Achromatopsia**  
48, 0.006, 296.813

**Achromatomaly**  
48, 7.354, 125.641

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 49, 20.489, 123.473 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(108, 121, 87)` looks like.

```
.text, #text, p{  
    color:rgb(108, 121, 87)  
}
```

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(108, 121, 87) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(108, 121, 87) }
```

## Border

The CSS property to change the border of an element to CIELCh 49, 20.489, 123.473 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(108, 121, 87) }
```

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

```
.border{ border-color:rgb(108, 121, 87) }
```

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

Here you see how a box with a 4 pixel `rgb(108, 121, 87)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(108, 121, 87); -webkit-box-  
shadow:4px 4px 4px 4px rgb(108, 121, 87);  
box-shadow:4px 4px 4px 4px rgb(108, 121,  
87) }
```

# Background

The CSS property to change the background color of an element to CIELCh 49, 20.489, 123.473 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(108, 121, 87) }
```

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

```
.background{ background-color: rgb(108,  
121, 87) }
```

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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