

# Converting Colors

CIELCh(77, 78.780, 90.564)

Have a look what the booklet for  
CIELCh(77, 78.780, 90.564) contains.

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# **Color**

**CIELCh(77, 78.722, 90.662)**

# Conversions

## Conversions Part 1

Format	Color
Hex	E0BB01
RGB	224, 187, 1
RGB Percent	88%, 73%, 0%
CMY	0.1205, 0.2657, 0.9972
CMYK	0.00, 0.17, 1.00, 0.12
HSL	50°, 99%, 44%
HSV	50°, 100%, 88%
XYZ	48.6467, 51.5317, 7.4027
YIQ	176.8590, 81.7580, -50.0020

# Conversions

## Conversions Part 2

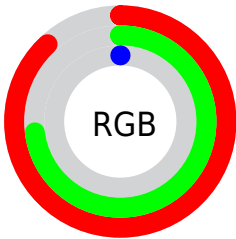
Format	Color
<a href="#">RYB</a>	<a href="#">45, 224, 1</a>
Decimal	<a href="#">14727937</a>
CIELab	<a href="#">77.00, -0.91, 78.72</a>
CIELCh	<a href="#">77, 78.722, 90.662</a>
Yxy	<a href="#">51.5317, 0.4522, 0.4790</a>
Android (android.graphics.Color)	<a href="#">4292918017 (0xFFE0BB01)</a>
YUV	<a href="#">176.8590, -86.6985, 41.3427</a>
Hunter-Lab	<a href="#">71.7856, -4.6613, 44.1358</a>

# Details

The CIELCh color **77, 78.722, 90.662** is a dark color, and the websafe version is hex **FFCC33**. The color can be described as middle washed orange. A complement of this color would be **31, 110.734, 303.691**, and the grayscale version is **73, 0.009, 296.813**.

A 20% lighter version of the original color is **94, 76.544, 100.367**, and **57, 61.956, 89.479** is the 20% darker color. If you saturate the color by 10%, you get **77, 78.773, 90.624**, and if you desaturate by 10%, it is **78, 76.713, 91.927**.

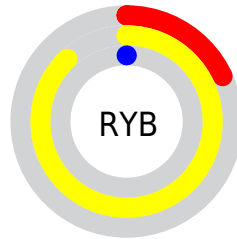
# Distribution



Red (88%)

Green (73%)

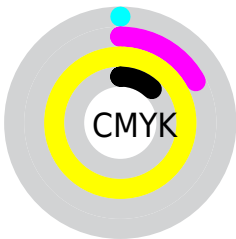
Blue (0%)



Red (18%)

Yellow (88%)

Blue (0%)

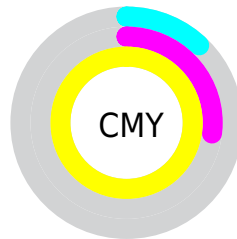


Cyan (0%)

Magenta (17%)

Yellow (100%)

Black (12%)



Cyan (12%)

Magenta (27%)

Yellow (100%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 77, 78.722, 90.662 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 77, 78.722, 90.662 by changing the saturation by 10% instead.



■ 77, 78.722, 90.662

■ 77, 78.722, 90.662

■ 100, 78.722,  
90.662

■ 67, 78.722, 90.662

■ 97, 78.722, 90.662

■ 57, 78.722, 90.662

■ 47, 78.722, 90.662

■ 37, 78.722, 90.662

■ 27, 78.722, 90.662

■ 17, 78.722, 90.662

■ 7, 78.722, 90.662

■ 0, 78.722, 90.662

■ 77, 78.722, 90.662

■ 77, 78.722, 90.662

77, 78.773, 90.624

78, 76.713, 91.927

79, 72.295, 93.128

80, 65.675, 94.303

81, 57.554, 95.480

82, 48.527, 96.663

84, 39.004, 97.847

85, 29.236, 99.023

86, 19.374,  
100.182

88, 9.504, 101.309

# Harmonies

# Complementary

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



77, 78.722, 90.662



31, 110.734, 303.691

# Rectangle

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



77, 78.722, 90.662



77, 78.722, 140.662



77, 78.722, 270.662



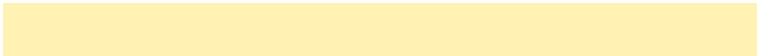
77, 78.722, 320.662

# Sweetspot

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



77, 78.721, 90.664



95, 32.794, 98.961



47, 86.626, 32.399



50, 22.361, 98.462



0, 0.000, 0.000



53, 0.007, 296.813



# Same Dimension

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



77, 78.721, 90.664



86, 86.748, 90.524



82, 93.761, 121.609



46, 5.577, 101.335



62, 65.805, 90.846



16, 23.861, 93.490





# Inverse Universe

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



31, 110.734, 303.691



36, 122.970, 303.905



32, 117.170, 308.672



44, 5.655, 283.511



24, 91.474, 303.391



4, 28.030, 292.150



# Previews

## White Background



This preview shows how the CIELCh color 77, 78.722, 90.662 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 CIELCh color 77, 78.722, 90.662 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 77, 78.722, 90.662

## Background



This preview shows how black text looks on a background with the CIELCh color 77, 78.722, 90.662.



This preview shows how white text looks on a background with the CIELCh color 77, 78.722, 90.662.

# 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

77, 78.618, 90.656

### Protanopia

77, 77.951, 95.022

### Deuteranopia

77, 77.815, 82.378



**Tritanopia**  
77, 23.875, 4.755



# Trichromacy



**Original Color**  
77, 78.618, 90.656

**Protanomaly**  
77, 78.252, 93.686

**Deuteranomaly**  
77, 78.152, 85.540

**Tritanomaly**  
76, 39.269, 73.332

# Monochromacy



**Original Color**  
77, 78.618, 90.656

**Achromatopsia**  
72, 0.009, 296.813

**Achromatomaly**  
73, 36.622, 97.955

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 77, 78.722, 90.662 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(224, 187, 1)` looks like.

```
.text, #text, p{  
    color:rgb(224, 187, 1)  
}
```

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(224, 187, 1) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(224, 187, 1) }
```

## Border

The CSS property to change the border of an element to CIELCh 77, 78.722, 90.662 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(224, 187, 1) }
```

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

```
.border{ border-color:rgb(224, 187, 1) }
```

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

Here you see how a box with a 4 pixel `rgb(224, 187, 1)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(224, 187, 1); -webkit-box-  
shadow:4px 4px 4px 4px rgb(224, 187, 1);  
box-shadow:4px 4px 4px 4px rgb(224, 187,  
1) }
```

# Background

The CSS property to change the background color of an element to CIELCh 77, 78.722, 90.662 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(224, 187, 1) }
```

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

```
.background{ background-color: rgb(224,  
187, 1) }
```

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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