

# Converting Colors

CIELCh(12, 23.657, 47.253)

Have a look what the booklet for  
CIELCh(12, 23.657, 47.253) contains.

<b>CIELCh(12, 24.023, 46.773)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	11
<b><i>Previews</i></b> .....	20
<b><i>Color Blindness Simulation</i></b> .....	23
<b><i>CSS Examples</i></b> .....	26

**Color**

**CIELCh(12, 24.023, 46.773)**

# Conversions

## Conversions Part 1

Format	Color
Hex	391502
RGB	57, 21, 2
RGB Percent	22%, 8%, 1%
CMY	0.7767, 0.9179, 0.9925
CMYK	0.00, 0.63, 0.97, 0.78
HSL	21°, 94%, 12%
HSV	21°, 97%, 22%
XYZ	1.9613, 1.4064, 0.2227
YIQ	29.5980, 27.5550, 1.7230

# Conversions

## Conversions Part 2

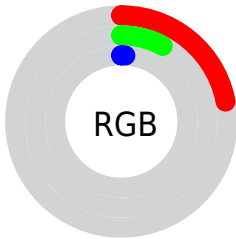
Format	Color
<a href="#">RYB</a>	<a href="#">57, 31, 2</a>
Decimal	<a href="#">3740930</a>
CIELab	<a href="#">12.00, 16.45, 17.50</a>
CIELCh	<a href="#">12, 24.023, 46.773</a>
Yxy	<a href="#">1.4064, 0.5463, 0.3917</a>
Android (android.graphics.Color)	<a href="#">4281931010 (0xFF391502)</a>
YUV	<a href="#">29.5980, -13.6058, 24.0316</a>
Hunter-Lab	<a href="#">11.8591, 8.7680, 7.1879</a>

# Details

The CIELCh color **12, 24.023, 46.773** is a dark color, and the websafe version is hex **330000**. A complement of this color would be **14, 16.358, 255.109**, and the grayscale version is **11, 0.003, 296.813**.

A 20% lighter version of the original color is **32, 23.861, 46.740**, and **0, 0.000, 0.000** is the 20% darker color. If you saturate the color by 10%, you get **12, 24.702, 46.211**, and if you desaturate by 10%, it is **13, 21.982, 48.894**.

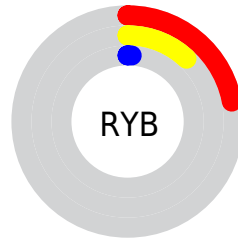
# Distribution



Red (22%)

Green (8%)

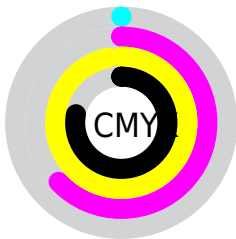
Blue (1%)



Red (22%)

Yellow (12%)

Blue (1%)

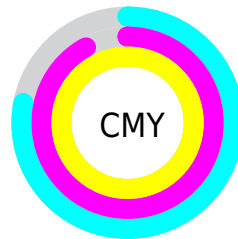


Cyan (0%)

Magenta (63%)

Yellow (97%)

Black (78%)



Cyan (78%)

Magenta (92%)

Yellow (99%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 12, 24.023, 46.773 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 12, 24.023, 46.773 by changing the saturation by 10% instead.



 12, 24.023, 46.773

 12, 24.023, 46.773

 100, 24.023,  
46.773

 2, 24.023, 46.773

 32, 24.023, 46.773

 0, 24.023, 46.773

 42, 24.023, 46.773

 52, 24.023, 46.773

 62, 24.023, 46.773

 72, 24.023, 46.773

 82, 24.023, 46.773

 92, 24.023, 46.773

■ 12, 24.023, 46.773

■ 12, 24.023, 46.773

■ 12, 24.702, 46.211

■ 13, 21.982, 48.894

■ 14, 19.875, 51.451

■ 15, 17.297, 53.126

■ 16, 14.301, 53.675

■ 18, 11.418, 54.190

■ 19, 8.694, 54.763

■ 20, 6.129, 55.384

■ 22, 3.715, 56.034

■ 23, 1.441, 56.652

# Harmonies

# Complementary

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



12, 24.023, 46.773



14, 16.358, 255.109

# Rectangle

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



12, 24.023, 46.773



12, 24.023, 96.773



12, 24.023, 226.773



12, 24.023, 276.773

# Sweetspot

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



12, 24.022, 46.777



27, 8.391, 55.148



9, 31.150, 343.698



12, 5.841, 55.052



68, 0.008, 296.813



15, 0.003, 296.813



# Same Dimension

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



12, 24.022, 46.777



16, 32.737, 48.797



20, 27.462, 93.022



10, 1.189, 56.563



21, 40.533, 50.099



52, 82.614, 49.417





# Inverse Universe

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



14, 16.358, 255.109



19, 20.449, 258.484



5, 33.360, 296.214



10, 1.151, 238.027



24, 24.115, 260.267

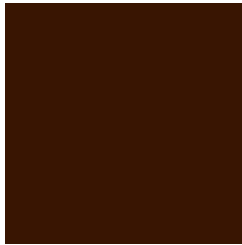


57, 47.662, 264.822



# Previews

## White Background



This preview shows how the CIE LCh color 12, 24.023, 46.773 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 ✓ Pass

# Black Background



## Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

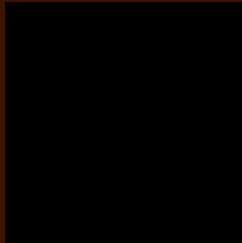
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

**CIELCh 12, 24.023, 46.773**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 12, 24.023, 46.773.

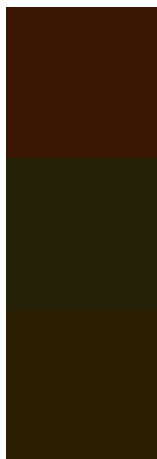


This preview shows how white text looks on a background with the CIELCh color 12, 24.023, 46.773.

# 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

12, 24.023, 46.773

### Protanopia

13, 16.268, 98.384

### Deuteranopia

12, 18.503, 85.924



**Tritanopia**  
12, 20.303, 24.367



# Trichromacy



## Original Color

12, 24.023, 46.773

## Protanomaly

12, 16.628, 74.856

## Deuteranomaly

12, 18.829, 67.852

## Tritanomaly

12, 21.714, 34.650

# Monochromacy



## Original Color

12, 24.023, 46.773

## Achromatopsia

11, 0.003, 296.813

## Achromatomaly

11, 8.986, 54.325

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 12, 24.023, 46.773 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(57, 21, 2)` looks like.

```
.text, #text, p{  
    color:rgb(57, 21, 2)  
}
```

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(57, 21, 2) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(57, 21, 2) }
```

## Border

The CSS property to change the border of an element to CIELCh 12, 24.023, 46.773 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(57, 21, 2) }
```

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

```
.border{ border-color:rgb(57, 21, 2) }
```

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

Here you see how a box with a 4 pixel `rgb(57, 21, 2)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(57, 21, 2); -webkit-box-shadow:4px  
4px 4px 4px rgb(57, 21, 2); box-shadow:4px  
4px 4px 4px rgb(57, 21, 2) }
```

# Background

The CSS property to change the background color of an element to CIELCh 12, 24.023, 46.773 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(57, 21, 2) }
```

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

```
.background{ background-color: rgb(57, 21,  
2) }
```

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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