

# Converting Colors

CIELCh(52, 91.797, 30.656)

Have a look what the booklet for  
CIELCh(52, 91.797, 30.656) contains.

<b>CIELCh(52, 91.976, 30.745)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	11
<i><b>Previews</b></i> .....	20
<i><b>Color Blindness Simulation</b></i> .....	23
<i><b>CSS Examples</b></i> .....	26

**Color**

**CIELCh(52, 91.976, 30.745)**

# Conversions

## Conversions Part 1

Format	Color
Hex	F80031
RGB	248, 0, 49
RGB Percent	97%, 0%, 19%
CMY	0.0283, 0.9987, 0.8084
CMYK	0.00, 1.00, 0.80, 0.03
HSL	348°, 100%, 49%
HSV	348°, 100%, 97%
XYZ	39.1914, 20.1443, 4.7128
YIQ	79.7380, 132.0790, 67.8150

# Conversions

## Conversions Part 2

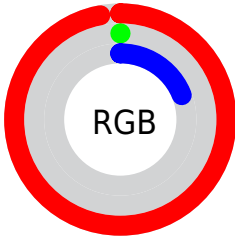
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	248, 0, 49
Decimal	16252977
CIE <sub>Lab</sub>	52.00, 79.05, 47.02
CIE <sub>LCh</sub>	52, 91.976, 30.745
Yxy	20.1443, 0.6119, 0.3145
Android (android.graphics.Color)	4294443057 (0xFFFF80031)
YUV	79.7380, -15.1538, 147.5658
Hunter-Lab	44.8824, 77.3221, 25.1920

# Details

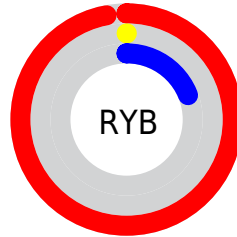
The CIELCh color **52, 91.976, 30.745** is a dark color, and the websafe version is hex **FF0033**. The color can be described as dark saturated red. A complement of this color would be **88, 60.786, 170.897**, and the grayscale version is **34, 0.005, 296.813**.

A 20% lighter version of the original color is **62, 68.650, 28.337**, and **38, 79.940, 38.868** is the 20% darker color. If you saturate the color by 10%, you get **52, 92.053, 30.812**, and if you desaturate by 10%, it is **53, 85.760, 25.421**.

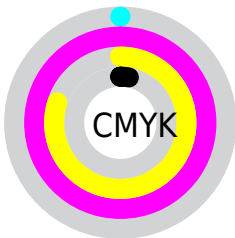
# Distribution



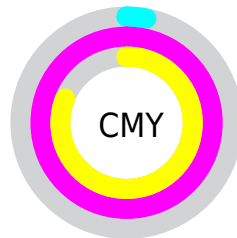
- Red (97%)
- Green (0%)
- Blue (19%)



- Red (97%)
- Yellow (0%)
- Blue (19%)



- Cyan (0%)
- Magenta (100%)
- Yellow (80%)
- Black (3%)



- Cyan (3%)
- Magenta (100%)
- Yellow (81%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 52, 91.976, 30.745 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 52, 91.976, 30.745 by changing the saturation by 10% instead.



 52, 91.976, 30.745

 52, 91.976, 30.745

 100, 91.976,  
30.745

 42, 91.976, 30.745

 72, 91.976, 30.745

 32, 91.976, 30.745

 82, 91.976, 30.745

 22, 91.976, 30.745

 92, 91.976, 30.745

 12, 91.976, 30.745

 2, 91.976, 30.745

 0, 91.976, 30.745

 52, 91.976, 30.745

 52, 91.976, 30.745

 52, 92.053, 30.812

 53, 85.760, 25.421

 55, 78.564, 20.502

■ 58, 70.139, 16.411

■ 62, 60.621, 13.147

■ 67, 50.367, 10.576

■ 72, 39.796, 8.541

■ 78, 29.264, 6.905

■ 85, 19.019, 5.560

■ 91, 9.205, 4.415

# Harmonies

# Complementary

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



52, 91.976, 30.745



88, 60.786, 170.897

# Rectangle

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



52, 91.976, 30.745



52, 91.976, 80.745



52, 91.976, 210.745



52, 91.976, 260.745

# Sweetspot

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



52, 91.972, 30.747



80, 30.094, 6.930



50, 115.267, 320.583



40, 20.707, 7.583



0, 0.000, 0.000



53, 0.007, 296.813



# Same Dimension

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



52, 91.972, 30.747



53, 94.153, 30.900



57, 93.052, 46.841



49, 5.333, 4.375



39, 74.352, 29.829



9, 31.011, 17.960





# Inverse Universe

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



52, 91.972, 30.747



53, 94.153, 30.900



67, 48.302, 257.068



49, 5.333, 4.375



39, 74.352, 29.829



9, 31.011, 17.960



# Previews

## White Background



This preview shows how the CIELCh color 52, 91.976, 30.745 looks on a white 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

# Black Background



This preview shows how the CIE LCh color 52, 91.976, 30.745 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 52, 91.976, 30.745**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 52, 91.976, 30.745.



This preview shows how white text looks on a background with the CIELCh color 52, 91.976, 30.745.

# 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

52, 92.025, 30.709

### Protanopia

53, 28.867, 96.555

### Deuteranopia

52, 51.497, 82.351



**Tritanopia**  
52, 100.802, 40.783



# Trichromacy



**Original Color**  
52, 92.025, 30.709



**Protanomaly**  
46, 47.182, 35.393



**Deuteranomaly**  
47, 63.155, 45.550



**Tritanomaly**  
52, 98.453, 38.261

# Monochromacy



**Original Color**  
52, 92.025, 30.709



**Achromatopsia**  
34, 0.005, 296.813



**Achromatomaly**  
35, 40.802, 13.280

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 52, 91.976, 30.745 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(248, 0, 49)` looks like.

```
.text, #text, p{  
    color:rgb(248, 0, 49)  
}
```

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(248, 0, 49) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(248, 0, 49) }
```

## Border

The CSS property to change the border of an element to CIELCh 52, 91.976, 30.745 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(248, 0, 49) }
```

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

```
.border{ border-color:rgb(248, 0, 49) }
```

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

Here you see how a box with a 4 pixel `rgb(248, 0, 49)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(248, 0, 49); -webkit-box-  
shadow:4px 4px 4px 4px rgb(248, 0, 49);  
box-shadow:4px 4px 4px 4px rgb(248, 0, 49)  
}
```

# Background

The CSS property to change the background color of an element to CIELCh 52, 91.976, 30.745 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(248, 0, 49) }
```

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

```
.background{ background-color: rgb(248, 0,  
49) }
```

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](#).

Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

**@ConvertingColor**