

# Converting Colors

CIELCh(45, 73.601, 33.839)

Have a look what the booklet for  
CIELCh(45, 73.601, 33.839) contains.

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**Color**

**CIELCh(45, 73.573, 33.637)**

# Conversions

## Conversions Part 1

Format	Color
Hex	CB2A2A
RGB	203, 42, 42
RGB Percent	80%, 16%, 16%
CMY	0.2035, 0.8348, 0.8350
CMYK	0.00, 0.79, 0.79, 0.20
HSL	0°, 66%, 48%
HSV	0°, 79%, 80%
XYZ	25.9065, 14.5417, 3.6383
YIQ	90.1390, 95.9560, 34.1320

# Conversions

## Conversions Part 2

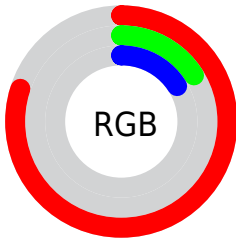
Format	Color
<a href="#">RYB</a>	<a href="#">203, 42, 42</a>
Decimal	<a href="#">13314602</a>
CIELab	<a href="#">45.00, 61.25, 40.75</a>
CIELCh	<a href="#">45, 73.573, 33.637</a>
Yxy	<a href="#">14.5417, 0.5876, 0.3298</a>
Android (android.graphics.Color)	<a href="#">4291504682</a> ( <a href="#">0xFFC2A2A2</a> )
YUV	<a href="#">90.1390, -23.7325, 98.9791</a>
Hunter-Lab	<a href="#">38.1336, 54.5321, 21.0367</a>

# Details

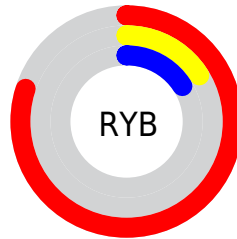
The CIELCh color **45, 73.573, 33.637** is a dark color, and the websafe version is hex **CC3333**. The color can be described as dark muted red. A complement of this color would be **75, 40.075, 196.575**, and the grayscale version is **38, 0.005, 296.813**.

A 20% lighter version of the original color is **63, 68.386, 33.510**, and **28, 66.016, 39.038** is the 20% darker color. If you saturate the color by 10%, you get **43, 81.863, 37.133**, and if you desaturate by 10%, it is **48, 63.964, 30.202**.

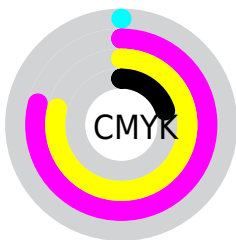
# Distribution



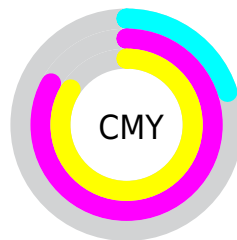
- Red (80%)
- Green (16%)
- Blue (16%)



- Red (80%)
- Yellow (16%)
- Blue (16%)



- Cyan (0%)
- Magenta (79%)
- Yellow (79%)
- Black (20%)



- Cyan (20%)
- Magenta (83%)
- Yellow (84%)

# Brightness & Saturation Gradients


These gradients show how the CIELCh color 45, 73.573, 33.637 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 45, 73.573, 33.637 by changing the saturation by 10% instead.



 45, 73.573, 33.637

 45, 73.573, 33.637

 100, 73.573,  
33.637

 35, 73.573, 33.637

 65, 73.573, 33.637

 25, 73.573, 33.637

 75, 73.573, 33.637

 15, 73.573, 33.637

 85, 73.573, 33.637

 5, 73.573, 33.637

 95, 73.573, 33.637

 0, 73.573, 33.637

 45, 73.573, 33.637

 45, 73.573, 33.637

 43, 81.863, 37.133

 48, 63.964, 30.202

 42, 87.676, 39.807

 51, 53.850, 27.292

42, 88.092, 40.003

55, 43.669, 24.984

60, 33.738, 23.203

65, 24.270, 21.838

71, 15.384, 20.785

76, 7.122, 19.943

82, 0.525, 200.464

88, 7.596, 198.986

# Harmonies

# Complementary

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



45, 73.573, 33.637



75, 40.075, 196.575

# Rectangle

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



45, 73.573, 33.637



45, 73.573, 83.637



45, 73.573, 213.637



45, 73.573, 263.637

# Sweetspot

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



45, 73.570, 33.639



84, 23.480, 21.282



50, 90.601, 327.993



42, 16.352, 21.679



0, 0.000, 0.000



53, 0.007, 296.813



# Same Dimension

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



45, 73.570, 33.639



54, 102.069, 39.014



59, 59.930, 65.040



40, 4.368, 19.952



34, 75.549, 39.827



4, 17.907, 19.422





# Inverse Universe

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



75, 40.075, 196.575



91, 49.833, 196.452



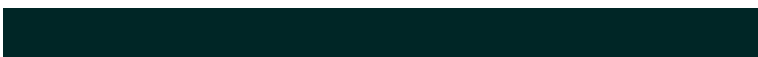
51, 48.729, 275.203



42, 4.118, 199.006



62, 36.283, 196.438



13, 13.508, 196.427



# Previews

## White Background



This preview shows how the CIELCh color 45, 73.573, 33.637 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 45, 73.573, 33.637 looks on a black 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

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

**CIELCh 45, 73.573, 33.637**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 45, 73.573, 33.637.



This preview shows how white text looks on a background with the CIELCh color 45, 73.573, 33.637.

# 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

45, 73.573, 33.637

### Protanopia

45, 27.367, 95.389

### Deuteranopia

45, 44.200, 82.388



**Tritanopia**  
45, 73.573, 33.637



# Trichromacy



**Original Color**  
45, 73.573, 33.637

**Protanomaly**  
43, 37.884, 49.317

**Deuteranomaly**  
43, 50.519, 53.723

**Tritanomaly**  
45, 73.573, 33.637

# Monochromacy



**Original Color**  
45, 73.573, 33.637

**Achromatopsia**  
38, 0.005, 296.813

**Achromatomaly**  
38, 26.899, 23.746

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 45, 73.573, 33.637 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(203, 42, 42)` looks like.

```
.text, #text, p{  
    color:rgb(203, 42, 42)  
}
```

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(203, 42, 42) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(203, 42, 42) }
```

## Border

The CSS property to change the border of an element to CIELCh 45, 73.573, 33.637 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(203, 42, 42) }
```

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

```
.border{ border-color:rgb(203, 42, 42) }
```

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

Here you see how a box with a 4 pixel `rgb(203, 42, 42)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(203, 42, 42); -webkit-box-  
shadow:4px 4px 4px 4px rgb(203, 42, 42);  
box-shadow:4px 4px 4px 4px rgb(203, 42,  
42) }
```

# Background

The CSS property to change the background color of an element to CIELCh 45, 73.573, 33.637 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(203, 42, 42) }
```

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

```
.background{ background-color: rgb(203, 42,  
42) }
```

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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