

# Converting Colors

CIELCh(49, 0.969, 230.580)

Have a look what the booklet for  
CIELCh(49, 0.969, 230.580) contains.

<b>CIELCh(49, 0.988, 236.228)</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(49, 0.988, 236.228)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	737576
RGB	115, 117, 118
RGB Percent	45%, 46%, 46%
CMY	0.5500, 0.5421, 0.5382
CMYK	0.03, 0.01, 0.00, 0.54
HSL	200°, 1%, 46%
HSV	200°, 3%, 46%
XYZ	16.6245, 17.5941, 19.5812
YIQ	116.5160, -1.5130, -0.1130

# Conversions

## Conversions Part 2

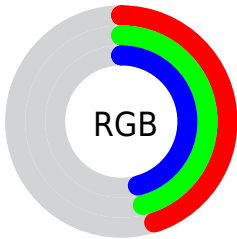
<b>Format</b>	<b>Color</b>
<b>R<sub>YB</sub></b>	115, 116, 118
Decimal	7566710
CIE Lab	49.00, -0.55, -0.82
CIE LCh	49, 0.988, 236.228
Yxy	17.5941, 0.3090, 0.3270
Android (android.graphics.Color)	4285756790 (0xFF737576)
YUV	116.5160, 0.7316, -1.3295
Hunter-Lab	41.9453, -2.6580, 1.6835

# Details

The CIELCh color  $49, 0.988, 236.228$  is a dark color, and the websafe version is hex  $666666$ . A complement of this color would be  $49, 0.994, 55.089$ , and the grayscale version is  $49, 0.007, 296.813$ .

A 20% lighter version of the original color is  $69, 0.926, 236.302$ , and  $29, 1.077, 236.226$  is the 20% darker color. If you saturate the color by 10%, you get  $47, 4.774, 236.771$ , and if you desaturate by 10%, it is  $51, 2.917, 54.970$ .

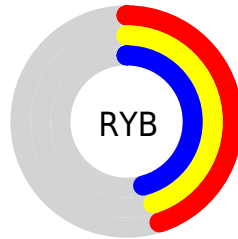
# Distribution



Red (45%)

Green (46%)

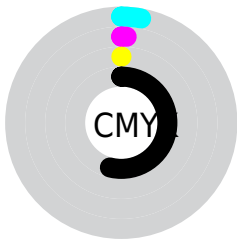
Blue (46%)



Red (45%)

Yellow (45%)

Blue (46%)

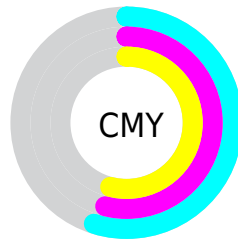


Cyan (3%)

Magenta (1%)

Yellow (0%)

Black (54%)



Cyan (55%)

Magenta (54%)

Yellow (54%)

# Brightness & Saturation Gradients

These gradients show how the CIELCh color 49, 0.988, 236.228 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, 0.988, 236.228 by changing the saturation by 10% instead.



■ 49, 0.988, 236.228

■ 49, 0.988, 236.228

■ 100, 0.988,  
236.228

■ 39, 0.988, 236.228

■ 69, 0.988, 236.228

■ 29, 0.988, 236.228

■ 79, 0.988, 236.228

■ 19, 0.988, 236.228

■ 89, 0.988, 236.228

■ 9, 0.988, 236.228

■ 99, 0.988, 236.228

■ 0, 0.988, 236.228

■ 49, 0.988, 236.228

■ 49, 0.988, 236.228

■ 47, 4.774, 236.771

■ 51, 2.917, 54.970

■ 45, 8.407, 237.843

■ 53, 6.913, 54.445

43, 11.852,  
239.194

55, 10.975, 53.980

41, 15.072,  
240.874

58, 15.083, 53.590

39, 18.033,  
242.949

60, 19.219, 53.267

37, 20.710,  
245.495

64, 27.528, 52.770

36, 23.099,  
248.585

67, 31.679, 52.580

34, 25.221,  
252.272

69, 35.819, 52.418

33, 27.138,  
256.552

# Harmonies

# Complementary

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



49, 0.988, 236.228



49, 0.994, 55.089

# Rectangle

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



49, 0.988, 236.228



49, 0.988, 286.228



49, 0.988, 56.228



49, 0.988, 106.228

# Sweetspot

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



49, 0.988, 236.143



63, 0.484, 236.515



49, 1.711, 154.938



32, 0.274, 236.577



82, 0.010, 296.813



33, 0.005, 296.813



# Same Dimension

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



49, 0.988, 236.143



62, 1.440, 236.129



49, 1.459, 281.725



24, 0.868, 236.132



33, 29.456, 259.950



65, 51.542, 263.010





# Inverse Universe

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



49, 1.703, 335.666



62, 2.485, 335.725



49, 1.443, 101.049



24, 1.501, 335.778



26, 52.922, 346.471



55, 88.791, 347.851



# Previews

## White Background



This preview shows how the CIELCh color 49, 0.988, 236.228 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, 0.988, 236.228 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

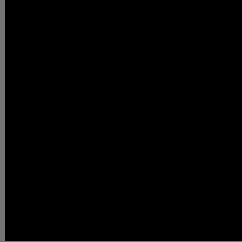
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

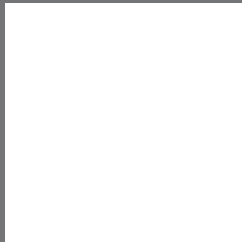
If you want to check with other color combinations, try the [Color Contrast Checker](#).

**CIELCh 49, 0.988, 236.228**

## **Background**



This preview shows how black text looks on a background with the CIELCh color 49, 0.988, 236.228.



This preview shows how white text looks on a background with the CIELCh color 49, 0.988, 236.228.

# 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, 0.988, 236.228

### Protanopia

49, 1.008, 343.509

### Deuteranopia

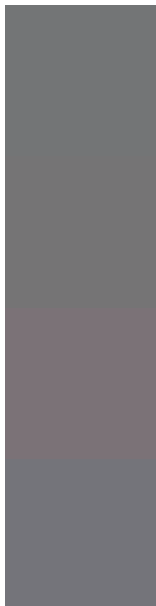
49, 6.706, 348.590



**Tritanopia**  
49, 5.289, 290.881



# Trichromacy



## Original Color

49, 0.988, 236.228

## Protanomaly

49, 0.722, 324.246

## Deuteranomaly

49, 4.696, 341.266

## Tritanomaly

49, 3.528, 290.655

# Monochromacy



## Original Color

49, 0.988, 236.228

## Achromatopsia

49, 0.007, 296.813

## Achromatomaly

49, 0.593, 290.329

# CSS Examples

## Text

The CSS property to change the color of the text to CIELCh 49, 0.988, 236.228 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(115, 117, 118)` looks like.

```
.text, #text, p{  
    color:rgb(115, 117, 118)  
}
```

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(115, 117, 118) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(115, 117, 118) }
```

## Border

The CSS property to change the border of an element to CIELCh 49, 0.988, 236.228 is called "border". The border property can be set on classes, ids or directly on the HTML element.

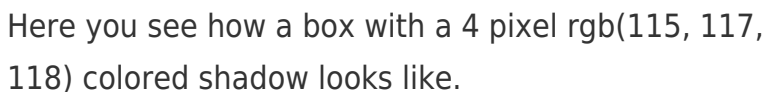
This example shows the color as border, it can be applied via the CSS property "border" or "border-color".

```
.border, #border, table{ border:4px solid rgb(115, 117, 118) }
```

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

```
.border{ border-color:rgb(115, 117, 118) }
```

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



Here you see how a box with a 4 pixel `rgb(115, 117, 118)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px 4px rgb(115, 117, 118); -webkit-box-shadow:4px 4px 4px 4px rgb(115, 117, 118); box-shadow:4px 4px 4px 4px rgb(115, 117, 118) }
```

# Background

The CSS property to change the background color of an element to CIELCh 49, 0.988, 236.228 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(115, 117, 118) }
```

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

```
.background{ background-color: rgb(115,  
117, 118) }
```

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