

Converting Colors

CIELCh(31, 1.663, 19.156)

Have a look what the booklet for
CIELCh(31, 1.663, 19.156) contains.

CIELCh(31, 1.770, 19.537)	3
<i>Conversions</i>	4
<i>Details</i>	6
<i>Harmonies</i>	11
<i>Previews</i>	20
<i>Color Blindness Simulation</i>	23
<i>CSS Examples</i>	26

Color

CIELCh(31, 1.770, 19.537)

Conversions

Conversions Part 1

Format	Color
Hex	4C4848
RGB	76, 72, 72
RGB Percent	30%, 28%, 28%
CMY	0.7017, 0.7174, 0.7174
CMYK	0.00, 0.05, 0.05, 0.70
HSL	0°, 3%, 29%
HSV	0°, 5%, 30%
XYZ	6.4795, 6.6515, 7.0848
YIQ	73.1960, 2.3840, 0.8480

Conversions

Conversions Part 2

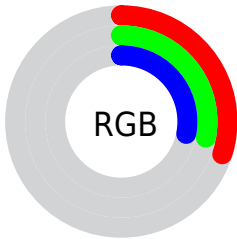
Format	Color
RYB	76, 72, 72
Decimal	4999240
CIELab	31.00, 1.67, 0.59
CIElCh	31, 1.770, 19.537
Yxy	6.6515, 0.3205, 0.3290
Android (android.graphics.Color)	4283189320 (0xFF4C4848)
YUV	73.1960, -0.5896, 2.4591
Hunter-Lab	25.7905, -0.2877, 1.7660

Details

The CIELCh color $[31, 1.770, 19.537]$ is a dark color, and the websafe version is hex `#333333`. A complement of this color would be $[32, 1.717, 199.336]$, and the grayscale version is $[31, 0.005, 296.813]$.

A 20% lighter version of the original color is $[51, 2.022, 19.443]$, and $[11, 1.531, 19.731]$ is the 20% darker color. If you saturate the color by 10%, you get $[28, 5.319, 20.306]$, and if you desaturate by 10%, it is $[34, 1.539, 199.395]$.

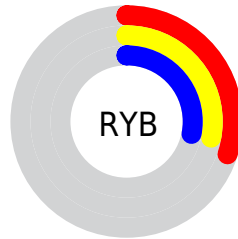
Distribution



 Red (30%)

 Green (28%)

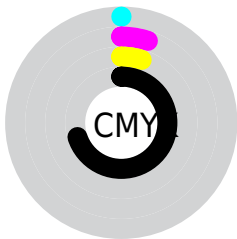
 Blue (28%)



 Red (30%)

 Yellow (28%)

 Blue (28%)

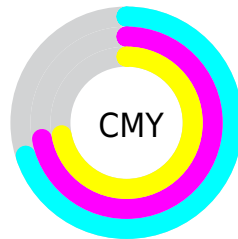


 Cyan (0%)

 Magenta (5%)

 Yellow (5%)

 Black (70%)



 Cyan (70%)

 Magenta (72%)

 Yellow (72%)

Brightness & Saturation Gradients

These gradients show how the CIELCh color 31, 1.770, 19.537 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 31, 1.770, 19.537 by changing the saturation by 10% instead.

■ 31, 1.770, 19.537 ■ 31, 1.770, 19.537

100, 1.770, 19.537 ■ 21, 1.770, 19.537

■ 51, 1.770, 19.537 ■ 11, 1.770, 19.537

■ 61, 1.770, 19.537 ■ 1, 1.770, 19.537

■ 71, 1.770, 19.537 ■ 0, 1.770, 19.537

■ 81, 1.770, 19.537

■ 91, 1.770, 19.537

■ 31, 1.770, 19.537 ■ 31, 1.770, 19.537

■ 28, 5.319, 20.306 ■ 34, 1.539, 199.395

■ 26, 9.121, 21.128 ■ 36, 4.622, 198.866

24, 13.171, 22.153

39, 7.500, 198.510

21, 17.448, 23.453

41, 10.195,
198.227

19, 21.901, 25.107

44, 12.725,
197.995

17, 26.449, 27.195

16, 30.927, 29.612

47, 15.111,
197.803

14, 34.563, 30.781

49, 17.369,
197.642

13, 37.537, 31.134

52, 19.513,
197.506

54, 21.558,
197.390

Harmonies

Complementary

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



31, 1.770, 19.537



32, 1.717, 199.336

Rectangle

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



31, 1.770, 19.537



31, 1.770, 69.537



31, 1.770, 199.537



31, 1.770, 249.537

Sweetspot

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



31, 1.769, 19.567



42, 0.831, 19.149



31, 3.101, 324.659



21, 0.476, 19.091



73, 0.009, 296.813



21, 0.004, 296.813

Same Dimension

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



31, 1.769, 19.567



40, 2.529, 19.647



32, 1.535, 74.728



14, 1.324, 19.634



19, 50.497, 35.970



48, 96.563, 40.003

Inverse Universe

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



32, 1.717, 199.336



42, 2.442, 199.264



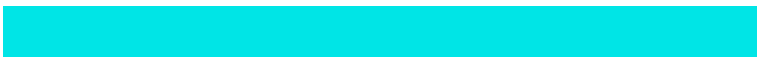
31, 1.524, 256.129



15, 1.280, 199.275



39, 25.560, 196.440



83, 46.252, 196.444

Previews

White Background



This preview shows how the CIELCh color 31, 1.770, 19.537 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



This preview shows how the CIE LCh color 31, 1.770, 19.537 looks on a black background.

Color Contrast Check

Large Text (above 18pt) WCAG AA × Fail

Any Text WCAG AA × Fail

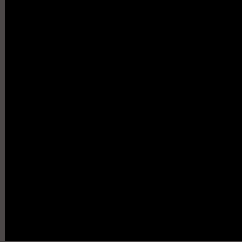
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

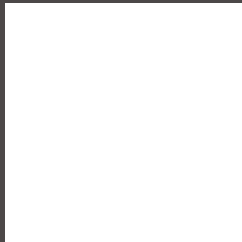
If you want to check with other color combinations, try the [Color Contrast Checker](#).

CIELCh 31, 1.770, 19.537

Background



This preview shows how black text looks on a background with the CIELCh color 31, 1.770, 19.537.

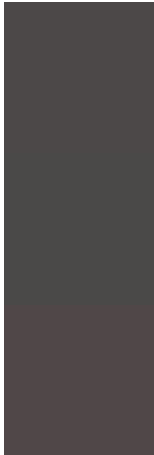


This preview shows how white text looks on a background with the CIELCh color 31, 1.770, 19.537.

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


31, 1.770, 19.537

Protanopia

31, 0.765, 74.892

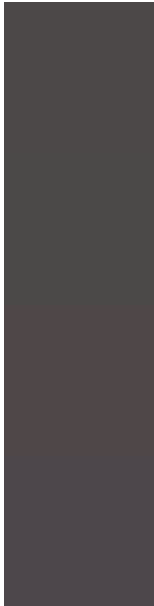
Deuteranopia

31, 4.068, 11.057



Tritanopia
31, 4.648, 324.798

Trichromacy



Original Color

31, 1.770, 19.537

Protanomaly

31, 1.080, 55.190

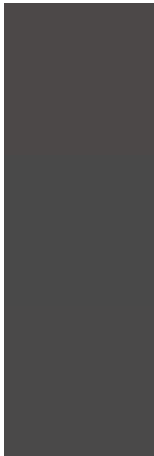
Deuteranomaly

31, 3.622, 9.851

Tritanomaly

31, 3.676, 336.110

Monochromacy



Original Color

31, 1.770, 19.537

Achromatopsia

31, 0.005, 296.813

Achromatomaly

31, 0.439, 18.863

CSS Examples

Text

The CSS property to change the color of the text to CIELCh 31, 1.770, 19.537 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(76, 72, 72)` looks like.

```
.text, #text, p{  
    color:rgb(76, 72, 72)  
}
```

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(76, 72, 72) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(76, 72, 72) }
```

Border

The CSS property to change the border of an element to CIELCh 31, 1.770, 19.537 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(76, 72, 72) }
```

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

```
.border{ border-color:rgb(76, 72, 72) }
```

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

Here you see how a box with a 4 pixel `rgb(76, 72, 72)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(76, 72, 72); -webkit-box-  
shadow:4px 4px 4px 4px rgb(76, 72, 72);  
box-shadow:4px 4px 4px 4px rgb(76, 72, 72)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 31, 1.770, 19.537 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(76, 72, 72) }
```

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

```
.background{ background-color: rgb(76, 72,  
72) }
```

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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