

Converting Colors

CIE LCh(13, 1.801, 16.302)

Have a look what the booklet for
CIELCh(13, 1.801, 16.302) contains.

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Color

CIELCh(13, 1.503, 19.685)

Conversions

Conversions Part 1

Format	Color
Hex	242121
RGB	36, 33, 33
RGB Percent	14%, 13%, 13%
CMY	0.8593, 0.8711, 0.8711
CMYK	0.00, 0.08, 0.08, 0.86
HSL	0°, 4%, 13%
HSV	0°, 8%, 14%
XYZ	1.5361, 1.5625, 1.6501
YIQ	33.8970, 1.7880, 0.6360

Conversions

Conversions Part 2

Format	Color
RYB	36, 33, 33
Decimal	2367777
CIELab	13.00, 1.42, 0.51
CIELCh	13, 1.503, 19.685
Yxy	1.5625, 0.3235, 0.3290
Android (android.graphics.Color)	4280557857 (0xFF242121)
YUV	33.8970, -0.4422, 1.8443
Hunter-Lab	12.5000, 0.0608, 0.9231

Details

The CIELCh color **13, 1.503, 19.685** is a dark color, and the websafe version is hex **333333**. A complement of this color would be **14, 1.444, 199.195**, and the grayscale version is **13, 0.003, 296.813**.

A 20% lighter version of the original color is **33, 1.309, 19.392**, and **0, 0.000, 0.000** is the 20% darker color. If you saturate the color by 10%, you get **12, 3.401, 20.325**, and if you desaturate by 10%, it is **14, 0.286, 199.966**.

Distribution



 Red (14%)

 Green (13%)

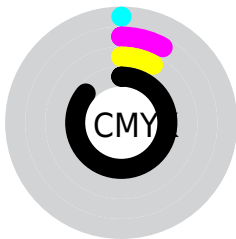
 Blue (13%)



 Red (14%)

 Yellow (13%)

 Blue (13%)




 Cyan (0%)

 Magenta (8%)

 Yellow (8%)

 Black (86%)



 Cyan (86%)

 Magenta (87%)

 Yellow (87%)

Brightness & Saturation Gradients

These gradients show how the CIELCh color 13, 1.503, 19.685 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 13, 1.503, 19.685 by changing the saturation by 10% instead.

■ 13, 1.503, 19.685 ■ 13, 1.503, 19.685

100, 1.503, 19.685 ■ 3, 1.503, 19.685

■ 33, 1.503, 19.685 ■ 0, 1.503, 19.685

■ 43, 1.503, 19.685

■ 53, 1.503, 19.685

■ 63, 1.503, 19.685

■ 73, 1.503, 19.685

■ 83, 1.503, 19.685

■ 93, 1.503, 19.685

■ 13, 1.503, 19.685 ■ 13, 1.503, 19.685

12, 3.401, 20.325	14, 0.286, 199.966
10, 5.414, 21.020	16, 1.970, 199.071
9, 7.532, 21.699	17, 3.556, 198.714
8, 9.625, 20.769	18, 5.054, 198.432
7, 11.410, 19.880	20, 6.471, 198.199
6, 12.787, 19.518	21, 7.815, 198.001
5, 13.861, 19.416	23, 9.092, 197.833
4, 14.856, 19.416	24, 10.310, 197.689
3, 15.851, 19.418	25, 11.474, 197.564

Harmonies

Complementary

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



13, 1.503, 19.685



14, 1.444, 199.195

Rectangle

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



13, 1.503, 19.685



13, 1.503, 69.685



13, 1.503, 199.685



13, 1.503, 249.685

Sweetspot

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



13, 1.503, 19.707



18, 0.655, 19.270



13, 2.619, 324.761



7, 0.457, 19.154



62, 0.008, 296.813



8, 0.002, 296.812

Same Dimension

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



13, 1.503, 19.707



17, 2.233, 19.850



14, 1.301, 74.556



5, 0.706, 19.312



14, 41.506, 32.485



44, 90.036, 40.003

Inverse Universe

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



14, 1.444, 199.195



18, 2.121, 199.075



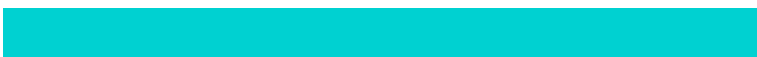
13, 1.284, 256.318



5, 0.705, 199.559



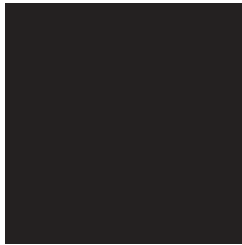
31, 21.900, 196.423



76, 43.133, 196.427

Previews

White Background



This preview shows how the CIELCh color 13, 1.503, 19.685 looks on a white background.

Color Contrast Check

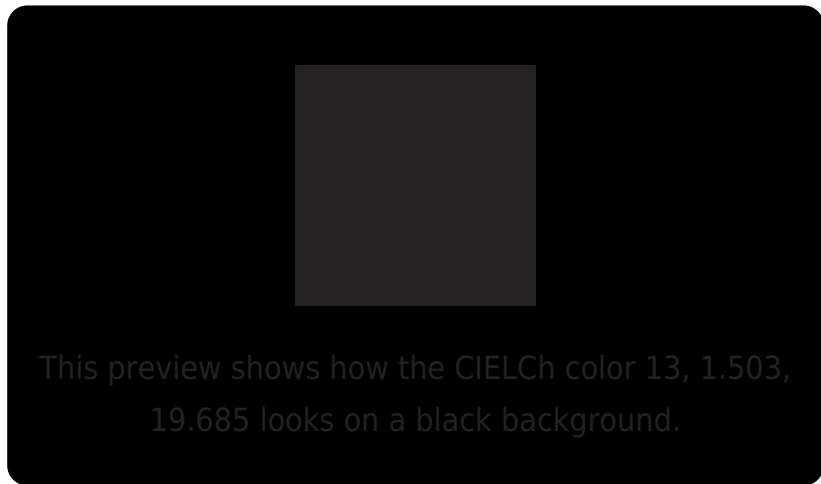
Large Text (above 18pt) WCAG AA ✓ Pass

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

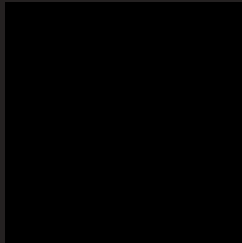
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

CIELCh 13, 1.503, 19.685

Background



This preview shows how black text looks on a background with the CIELCh color 13, 1.503, 19.685.

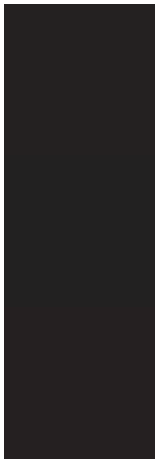


This preview shows how white text looks on a background with the CIELCh color 13, 1.503, 19.685.

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

13, 1.503, 19.685

Protanopia

13, 0.497, 19.203

Deuteranopia

13, 2.617, 4.175



Tritanopia
13, 2.071, 336.060

Trichromacy



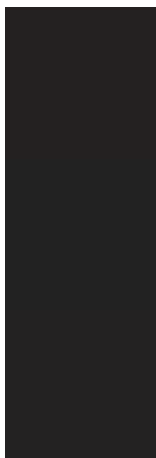
Original Color
13, 1.503, 19.685

Protanomaly
13, 0.998, 19.498

Deuteranomaly
13, 2.617, 4.175

Tritanomaly
13, 1.660, 354.195

Monochromacy



Original Color
13, 1.503, 19.685

Achromatopsia
13, 0.003, 296.813

Achromatomaly
13, 0.495, 19.194

CSS Examples

Text

The CSS property to change the color of the text to CIElCh 13, 1.503, 19.685 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(36, 33, 33)` looks like.

```
.text, #text, p{  
    color:rgb(36, 33, 33)  
}
```

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(36, 33, 33) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(36, 33, 33) }
```

Border

The CSS property to change the border of an element to CIELCh 13, 1.503, 19.685 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(36, 33, 33) }
```

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

```
.border{ border-color:rgb(36, 33, 33) }
```

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

Here you see how a box with a 4 pixel rgb(36, 33, 33) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(36, 33, 33); -webkit-box-  
shadow:4px 4px 4px 4px rgb(36, 33, 33);  
box-shadow:4px 4px 4px 4px rgb(36, 33, 33)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 13, 1.503, 19.685 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(36, 33, 33) }
```

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

```
.background{ background-color: rgb(36, 33,  
33) }
```

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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