

Converting Colors

CIELCh(13, 10.368, 22.460)

Have a look what the booklet for
CIELCh(13, 10.368, 22.460) contains.

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Color

CIELCh(13, 10.688, 22.476)

Conversions

Conversions Part 1

Format	Color
Hex	301C1C
RGB	48, 28, 28
RGB Percent	19%, 11%, 11%
CMY	0.8107, 0.8892, 0.8892
CMYK	0.00, 0.41, 0.41, 0.81
HSL	0°, 26%, 15%
HSV	0°, 41%, 19%
XYZ	1.8657, 1.5625, 1.3174
YIQ	33.9800, 11.9200, 4.2400

Conversions

Conversions Part 2

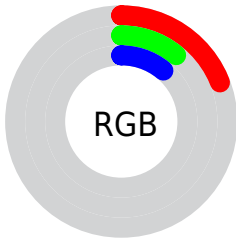
Format	Color
R_{YB}	48, 28, 28
Decimal	3152924
CIE Lab	13.00, 9.88, 4.09
CIE LCh	13, 10.688, 22.476
Yxy	1.5625, 0.3931, 0.3293
Android (android.graphics.Color)	4281343004 (0xFF301C1C)
YUV	33.9800, -2.9481, 12.2955
Hunter-Lab	12.5000, 4.7667, 2.5015

Details

The CIELCh color **13, 10.688, 22.476** is a dark color, and the websafe version is hex **333333**. A complement of this color would be **18, 8.423, 197.768**, and the grayscale version is **13, 0.003, 296.813**.

A 20% lighter version of the original color is **33, 10.578, 24.429**, and **0, 0.000, 0.000** is the 20% darker color. If you saturate the color by 10%, you get **11, 13.642, 23.745**, and if you desaturate by 10%, it is **15, 7.867, 21.465**.

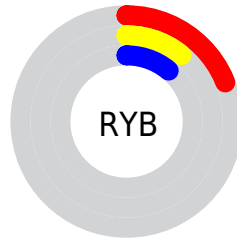
Distribution



Red (19%)

Green (11%)

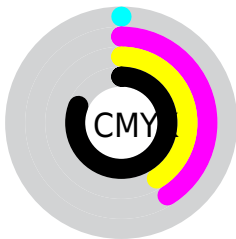
Blue (11%)



Red (19%)

Yellow (11%)

Blue (11%)

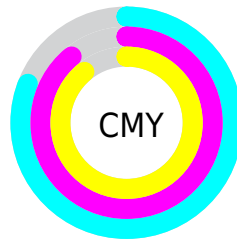


Cyan (0%)

Magenta (41%)

Yellow (41%)

Black (81%)



Cyan (81%)

Magenta (89%)

Yellow (89%)


Brightness & Saturation Gradients

These gradients show how the CIELCh color 13, 10.688, 22.476 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, 10.688, 22.476 by changing the saturation by 10% instead.

 13, 10.688, 22.476

 13, 10.688, 22.476

 100, 10.688,
22.476

 3, 10.688, 22.476

 33, 10.688, 22.476

 0, 10.688, 22.476

 43, 10.688, 22.476

 53, 10.688, 22.476

 63, 10.688, 22.476

 73, 10.688, 22.476

 83, 10.688, 22.476

 93, 10.688, 22.476

■ 13, 10.688, 22.476

■ 13, 10.688, 22.476

■ 11, 13.642, 23.745

■ 15, 7.867, 21.465

■ 10, 16.572, 24.370

■ 16, 5.200, 20.643

■ 9, 19.225, 23.671

■ 18, 2.691, 19.955

■ 8, 21.543, 22.503

■ 20, 0.338, 18.894

■ 7, 23.676, 21.535

■ 21, 1.867, 199.181

■ 6, 25.424, 20.900

■ 23, 3.935, 198.767

■ 25, 5.878, 198.455

■ 27, 7.707, 198.201

■ 29, 9.434, 197.989

Harmonies

Complementary

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



13, 10.688, 22.476



18, 8.423, 197.768

Rectangle

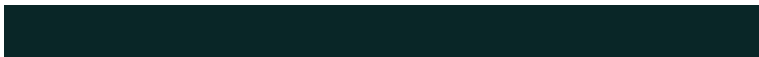
The Rectangle color scheme consists of four colors that form a rectangle on the color wheel.



13, 10.688, 22.476



13, 10.688, 72.476



13, 10.688, 202.476



13, 10.688, 252.476

Sweetspot

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



13, 10.687, 22.480



24, 3.565, 20.034



14, 16.758, 326.286



11, 2.390, 20.034



66, 0.008, 296.813



13, 0.003, 296.813

Same Dimension

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



13, 10.687, 22.480



17, 16.798, 23.946



16, 8.881, 71.153



7, 1.112, 19.323



16, 43.792, 33.546



45, 91.679, 40.002

Inverse Universe

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



18, 8.423, 197.768



25, 12.278, 197.406



15, 8.066, 261.018



7, 1.111, 199.546



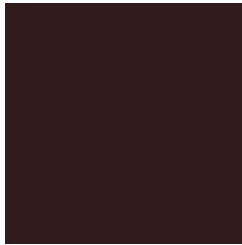
33, 22.829, 196.423



78, 43.920, 196.426

Previews

White Background



This preview shows how the CIELCh color 13, 10.688, 22.476 looks on a white background.

Color Contrast Check

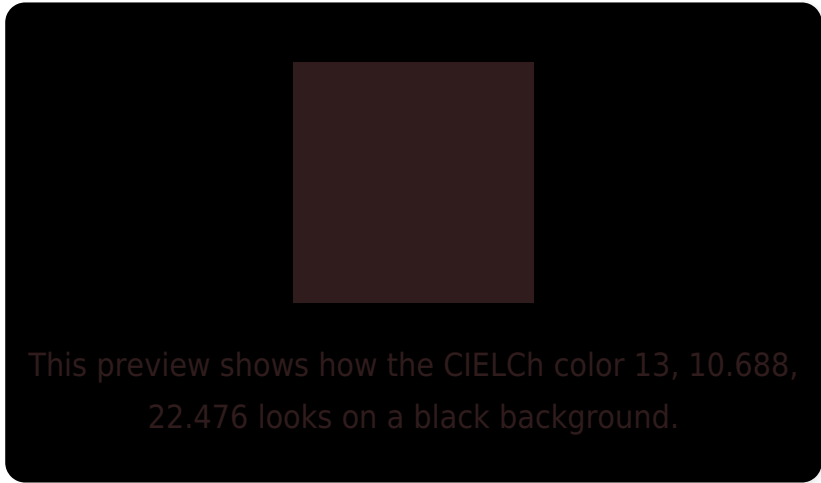
Large Text (above 18pt) WCAG AA ✓ Pass

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

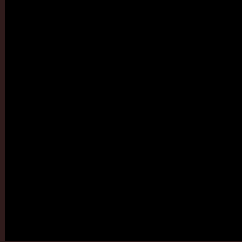
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

CIELCh 13, 10.688, 22.476

Background



This preview shows how black text looks on a background with the CIELCh color 13, 10.688, 22.476.

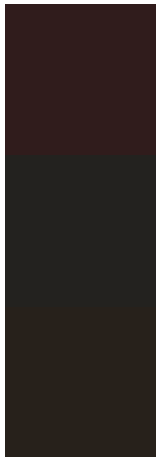


This preview shows how white text looks on a background with the CIELCh color 13, 10.688, 22.476.

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, 10.688, 22.476

Protanopia

13, 2.198, 96.184

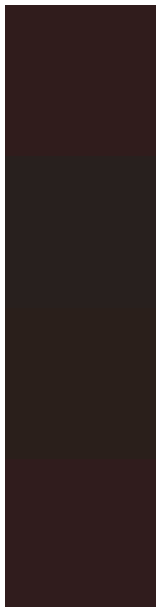
Deuteranopia

13, 5.364, 72.425



Tritanopia
13, 10.563, 14.882

Trichromacy



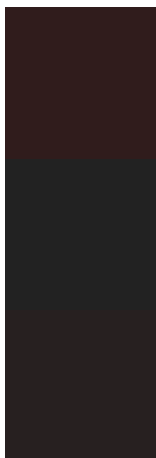
Original Color
13, 10.688, 22.476

Protanomaly
13, 4.415, 39.164

Deuteranomaly
13, 6.603, 46.197

Tritanomaly
13, 10.600, 18.703

Monochromacy



Original Color
13, 10.688, 22.476

Achromatopsia
13, 0.003, 296.813

Achromatomaly
13, 3.573, 20.305

CSS Examples

Text

The CSS property to change the color of the text to CIELCh 13, 10.688, 22.476 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(48, 28, 28)` looks like.

```
.text, #text, p{  
  color:rgb(48, 28, 28)  
}
```

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(48, 28, 28) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(48, 28, 28) }
```

Border

The CSS property to change the border of an element to CIELCh 13, 10.688, 22.476 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(48, 28, 28) }
```

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

```
.border{ border-color:rgb(48, 28, 28) }
```

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

Here you see how a box with a 4 pixel `rgb(48, 28, 28)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(48, 28, 28); -webkit-box-  
shadow:4px 4px 4px 4px rgb(48, 28, 28);  
box-shadow:4px 4px 4px 4px rgb(48, 28, 28)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 13, 10.688, 22.476 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(48, 28, 28) }
```

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

```
.background{ background-color: rgb(48, 28,  
28) }
```

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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