

Converting Colors

CIELCh(20, 13.312, 106.964)

Have a look what the booklet for
CIElCh(20, 13.312, 106.964)
contains.

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Color

CIELCh(20, 12.726, 107.076)

Conversions

Conversions Part 1

Format	Color
Hex	31311E
RGB	49, 49, 30
RGB Percent	19%, 19%, 12%
CMY	0.8062, 0.8063, 0.8809
CMYK	0.00, 0.00, 0.39, 0.81
HSL	60°, 24%, 16%
HSV	60°, 39%, 19%
XYZ	2.6407, 2.9891, 1.6915
YIQ	46.8340, 6.0990, -5.9090

Conversions

Conversions Part 2

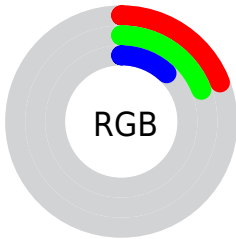
Format	Color
RYB	30, 49, 30
Decimal	3223838
CIELab	20.00, -3.74, 12.16
CIElCh	20, 12.726, 107.076
Yxy	2.9891, 0.3607, 0.4083
Android (android.graphics.Color)	4281413918 (0xFF31311E)
YUV	46.8340, -8.2992, 1.8996
Hunter-Lab	17.2889, -2.9919, 6.3014

Details

The CIELCh color **20, 12.726, 107.076** is a dark color, and the websafe version is hex **333333**. A complement of this color would be **12, 13.767, 294.174**, and the grayscale version is **20, 0.004, 296.813**.

A 20% lighter version of the original color is **40, 12.699, 106.158**, and **0, 0.000, 0.000** is the 20% darker color. If you saturate the color by 10%, you get **20, 15.903, 106.300**, and if you desaturate by 10%, it is **20, 9.473, 107.878**.

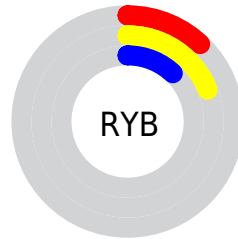
Distribution



Red (19%)

Green (19%)

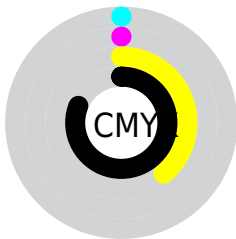
Blue (12%)



Red (12%)

Yellow (19%)

Blue (12%)

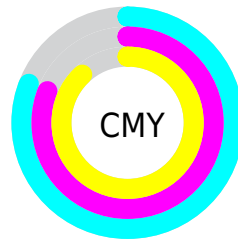


Cyan (0%)

Magenta (0%)

Yellow (39%)

Black (81%)



Cyan (81%)


Magenta (81%)


Yellow (88%)


Brightness & Saturation Gradients


These gradients show how the CIELCh color 20, 12.726, 107.076 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 20, 12.726, 107.076 by changing the saturation by 10% instead.

 20, 12.726,
107.076


 20, 12.726,
107.076


 100, 12.726,
107.076


 10, 12.726,
107.076


 40, 12.726,
107.076

 0, 12.726, 107.076

 50, 12.726,
107.076

 60, 12.726,
107.076

 70, 12.726,
107.076

 80, 12.726,
107.076

 90, 12.726,

107.076

■ 20, 12.726,
107.076

■ 20, 12.726,
107.076

■ 20, 15.903,
106.300

■ 20, 9.473, 107.878

■ 20, 6.171, 108.682

■ 20, 18.960,
105.554

■ 20, 2.842, 109.482

■ 20, 21.822,
104.869

■ 21, 0.501, 290.333

■ 20, 24.174,
104.404

■ 21, 3.847, 291.069

■ 21, 7.190, 291.824

■ 20, 26.166,
104.083

■ 21, 10.524,
292.557

■ 20, 28.156,
103.815

■ 21, 13.845,

■ 20, 28.452,
103.779

293.264

■ 22, 17.150,
293.942

Harmonies

Complementary

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



20, 12.726, 107.076



12, 13.767, 294.174

Rectangle

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



20, 12.726, 107.076



20, 12.726, 157.076



20, 12.726, 287.076



20, 12.726, 337.076

Sweetspot

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



20, 12.727, 107.079



27, 4.961, 109.154



14, 10.007, 20.898



13, 3.326, 109.154



66, 0.008, 296.813



13, 0.003, 296.813

Same Dimension

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



20, 12.727, 107.079



26, 18.681, 106.308



19, 13.621, 126.978



9, 1.893, 109.509



37, 45.045, 102.836



84, 85.703, 102.835

Inverse Universe

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



12, 13.767, 294.174



15, 20.733, 295.578



13, 14.273, 310.086



8, 1.922, 290.719



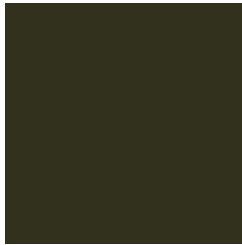
7, 61.814, 306.060



27, 118.353, 306.284

Previews

White Background



This preview shows how the CIELCh color 20, 12.726, 107.076 looks on a white background.

Color Contrast Check

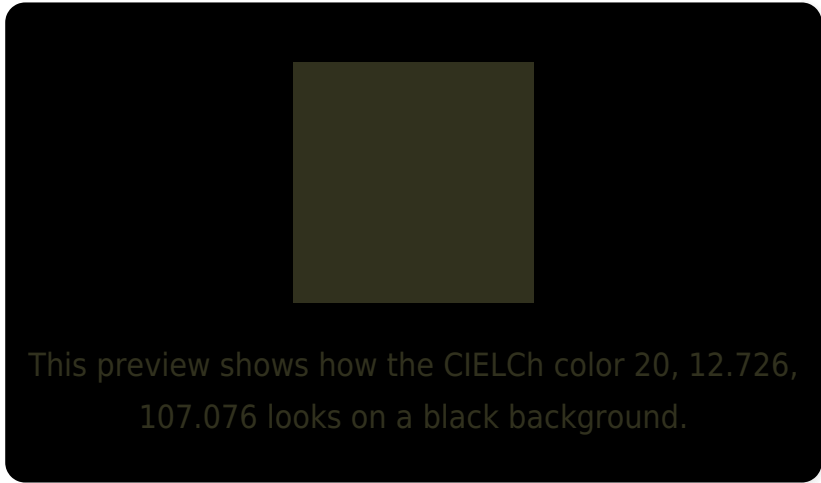
Large Text (above 18pt) WCAG AA ✓ Pass

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

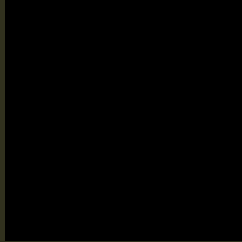
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

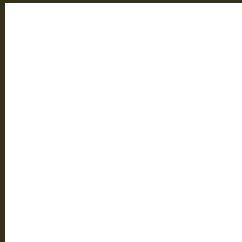
If you want to check with other color combinations, try the [Color Contrast Checker](#).

CIELCh 20, 12.726, 107.076

Background



This preview shows how black text looks on a background with the CIELCh color 20, 12.726, 107.076.

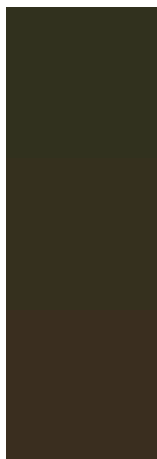


This preview shows how white text looks on a background with the CIELCh color 20, 12.726, 107.076.

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

20, 12.726, 107.076

Protanopia

20, 12.402, 94.962

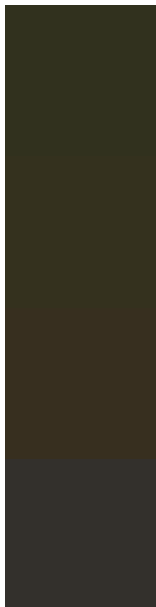
Deuteranopia

20, 12.094, 75.949



Tritanopia
20, 3.597, 330.995

Trichromacy



Original Color
20, 12.726, 107.076

Protanomaly
20, 12.826, 100.047

Deuteranomaly
20, 11.648, 86.304

Tritanomaly
20, 3.073, 81.246

Monochromacy



Original Color
20, 12.726, 107.076

Achromatopsia
19, 0.004, 296.813

Achromatomaly
20, 4.749, 109.017

CSS Examples

Text

The CSS property to change the color of the text to CIELCh 20, 12.726, 107.076 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(49, 49, 30)` looks like.

```
.text, #text, p{  
    color:rgb(49, 49, 30)  
}
```

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(49, 49, 30) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(49, 49, 30) }
```

Border

The CSS property to change the border of an element to CIELCh 20, 12.726, 107.076 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(49, 49, 30) }
```

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

```
.border{ border-color:rgb(49, 49, 30) }
```

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

Here you see how a box with a 4 pixel `rgb(49, 49, 30)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(49, 49, 30); -webkit-box-  
shadow:4px 4px 4px 4px rgb(49, 49, 30);  
box-shadow:4px 4px 4px 4px rgb(49, 49, 30)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 20, 12.726, 107.076 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(49, 49, 30) }
```

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

```
.background{ background-color: rgb(49, 49,  
30) }
```

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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