

Converting Colors

CIELCh(12, 9.777, 20.742)

Have a look what the booklet for
CIELCh(12, 9.777, 20.742) contains.

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Color

CIELCh(12, 9.650, 22.227)

Conversions

Conversions Part 1

Format	Color
Hex	2D1B1B
RGB	45, 27, 27
RGB Percent	18%, 11%, 11%
CMY	0.8244, 0.8949, 0.8949
CMYK	0.00, 0.40, 0.40, 0.82
HSL	360°, 25%, 14%
HSV	360°, 40%, 18%
XYZ	1.6560, 1.4064, 1.2095
YIQ	32.3820, 10.7280, 3.8160

Conversions

Conversions Part 2

Format	Color
R_{YB}	45, 27, 27
Decimal	2956059
CIE Lab	12.00, 8.93, 3.65
CIE LCh	12, 9.650, 22.227
Yxy	1.4064, 0.3877, 0.3292
Android (android.graphics.Color)	4281146139 (0xFF2D1B1B)
YUV	32.3820, -2.6533, 11.0660
Hunter-Lab	11.8591, 4.1730, 2.2542

Details

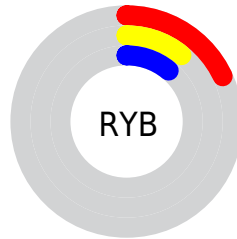
The CIELCh color **12, 9.650, 22.227** is a dark color, and the websafe version is hex **333333**. A complement of this color would be **17, 7.706, 197.807**, and the grayscale version is **12, 0.003, 296.813**.

A 20% lighter version of the original color is **32, 9.618, 20.958**, and **0, 0.000, 0.000** is the 20% darker color. If you saturate the color by 10%, you get **11, 12.396, 23.390**, and if you desaturate by 10%, it is **14, 7.029, 21.274**.

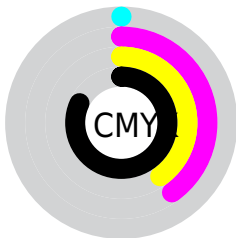
Distribution



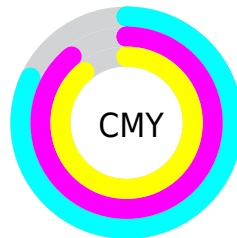
- Red (18%)
- Green (11%)
- Blue (11%)



- Red (18%)
- Yellow (11%)
- Blue (11%)



- Cyan (0%)
- Magenta (40%)
- Yellow (40%)
- Black (82%)




- Cyan (82%)
- Magenta (89%)
- Yellow (89%)

Brightness & Saturation Gradients

These gradients show how the CIELCh color 12, 9.650, 22.227 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 12, 9.650, 22.227 by changing the saturation by 10% instead.

 12, 9.650, 22.227  12, 9.650, 22.227

 100, 9.650, 22.227  2, 9.650, 22.227

 32, 9.650, 22.227  0, 9.650, 22.227

 42, 9.650, 22.227

 52, 9.650, 22.227

 62, 9.650, 22.227

 72, 9.650, 22.227

 82, 9.650, 22.227

 92, 9.650, 22.227

 12, 9.650, 22.227  12, 9.650, 22.227

■ 11, 12.396, 23.390

■ 14, 7.029, 21.274

■ 9, 15.068, 23.360

■ 15, 4.551, 20.494

■ 8, 17.526, 22.234

■ 17, 2.220, 19.828

■ 7, 19.559, 21.206

■ 18, 0.031, 13.160

■ 6, 21.367, 20.514

■ 20, 2.022, 199.094

■ 5, 23.055, 20.024

■ 22, 3.950, 198.703

■ 23, 5.764, 198.402

■ 25, 7.473, 198.155

■ 27, 9.090, 197.948

Harmonies

Complementary

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



12, 9.650, 22.227



17, 7.706, 197.807

Rectangle

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



12, 9.650, 22.227



12, 9.650, 72.227



12, 9.650, 202.227



12, 9.650, 252.227

Sweetspot

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



12, 9.649, 22.232



22, 3.323, 19.994



13, 15.172, 325.720



10, 2.229, 19.987



65, 0.008, 296.813



12, 0.003, 296.813

Same Dimension

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



12, 9.649, 22.232



15, 14.926, 23.515



15, 7.976, 69.626



7, 1.112, 19.297



16, 43.795, 33.534



45, 91.679, 39.997

Inverse Universe

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



12, 9.649, 22.232



15, 14.926, 23.515



14, 7.213, 258.779



7, 1.112, 19.297



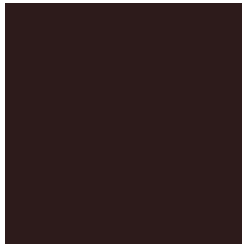
16, 43.795, 33.534



45, 91.679, 39.997

Previews

White Background



This preview shows how the CIELCh color 12, 9.650, 22.227 looks on a white background.

Color Contrast Check

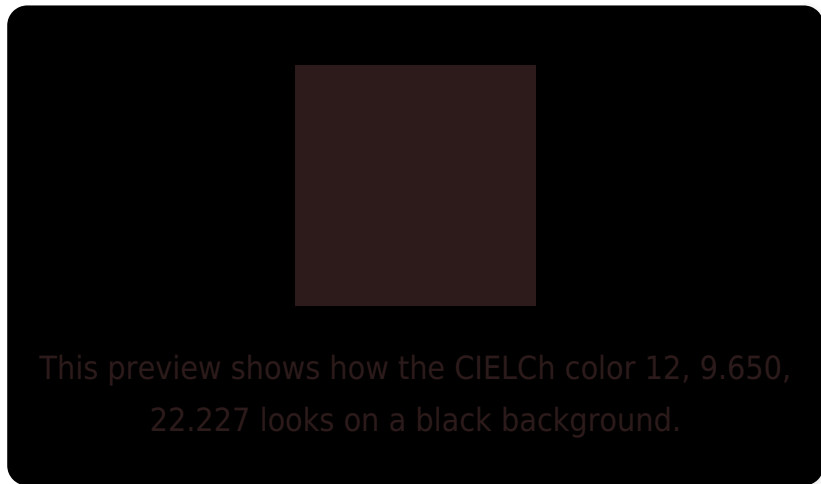
Large Text (above 18pt) WCAG AA ✓ Pass

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

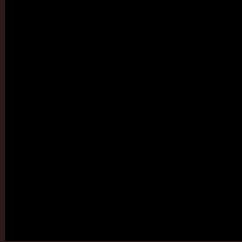
Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail

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

CIELCh 12, 9.650, 22.227

Background



This preview shows how black text looks on a background with the CIELCh color 12, 9.650, 22.227.

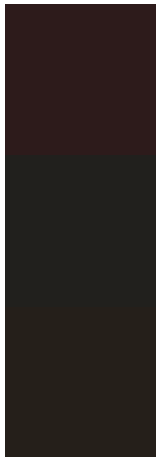


This preview shows how white text looks on a background with the CIELCh color 12, 9.650, 22.227.

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

12, 9.650, 22.227

Protanopia

12, 2.217, 96.141

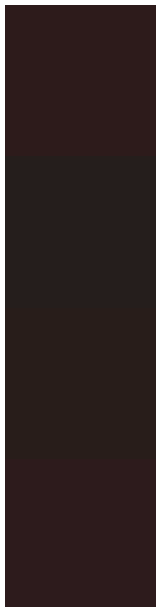
Deuteranopia

12, 4.839, 67.667



Tritanopia
12, 9.553, 13.746

Trichromacy



Original Color

12, 9.650, 22.227

Protanomaly

12, 3.956, 41.567

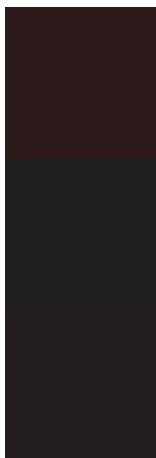
Deuteranomaly

12, 6.337, 40.661

Tritanomaly

12, 9.573, 18.009

Monochromacy



Original Color

12, 9.650, 22.227

Achromatopsia

12, 0.003, 296.813

Achromatomaly

12, 3.608, 20.351

CSS Examples

Text

The CSS property to change the color of the text to CIELCh 12, 9.650, 22.227 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(45, 27, 27)` looks like.

```
.text, #text, p{  
    color:rgb(45, 27, 27)  
}
```

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(45, 27, 27) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(45, 27, 27) }
```

Border

The CSS property to change the border of an element to CIELCh 12, 9.650, 22.227 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(45, 27, 27) }
```

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

```
.border{ border-color:rgb(45, 27, 27) }
```

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

Here you see how a box with a 4 pixel `rgb(45, 27, 27)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(45, 27, 27); -webkit-box-  
shadow:4px 4px 4px 4px rgb(45, 27, 27);  
box-shadow:4px 4px 4px 4px rgb(45, 27, 27)  
}
```

Background

The CSS property to change the background color of an element to CIELCh 12, 9.650, 22.227 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(45, 27, 27) }
```

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

```
.background{ background-color: rgb(45, 27,  
27) }
```

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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