

# Converting Colors

XYZ(13.4481, 22.9445, 16.6653)

Have a look what the booklet for  
XYZ(13.4481, 22.9445, 16.6653)  
contains.

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# Color

**XYZ(13.3545, 22.7920,  
16.5274)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	009667
RGB	0, 150, 103
RGB Percent	0%, 59%, 40%
CMY	1.0000, 0.4118, 0.5961
CMYK	1.00, 0.00, 0.31, 0.41
HSL	161°, 100%, 29%
HSV	161°, 100%, 59%
XYZ	13.3545, 22.7920, 16.5274
YIQ	99.7920, -74.3130, -46.4170

# Conversions

## Conversions Part 2

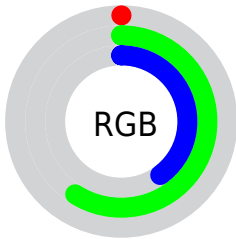
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 89, 150
Decimal	38503
CIELab	54.86, -45.48, 15.48
CIELCh	55, 48.046, 161.203
Yxy	22.7920, 0.2535, 0.4327
Android (android.graphics.Color)	4278228583 (0xFF009667)
YUV	99.7920, 1.5815, -87.5176
Hunter-Lab	47.7410, -33.6152, 12.8931

# Details

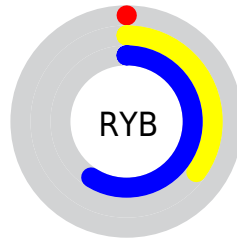
The XYZ color **13.3545, 22.7920, 16.5274** is a dark color, and the websafe version is hex **009966**. A complement of this color would be **13.0915, 6.6897, 3.2913**, and the grayscale version is **12.0705, 12.6991, 13.8294**.

A 20% lighter version of the original color is **31.5018, 47.9742, 38.1715**, and **5.0815, 9.0209, 5.2148** is the 20% darker color. If you saturate the color by 10%, you get **13.3549, 22.7928, 16.5275**, and if you desaturate by 10%, it is **13.7948, 22.9915, 17.8150**.

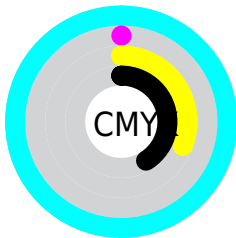
# Distribution



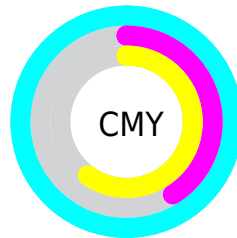
- Red (0%)
- Green (59%)
- Blue (40%)



- Red (0%)
- Yellow (35%)
- Blue (59%)



- Cyan (100%)
- Magenta (0%)
- Yellow (31%)
- Black (41%)




- Cyan (100%)
- Magenta (41%)
- Yellow (60%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 13.3545, 22.7920, 16.5274 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 XYZ color 13.3545, 22.7920, 16.5274 by changing the saturation by 10% instead.





 13.3545, 22.7920,  
16.5274


 13.3545, 22.7920,  
16.5274


206.7693,  
266.6549, 244.3851

 7.7518, 14.4400,  
9.7397


 31.5351, 48.0516,  
38.2909


 3.9870, 8.4273,  
5.1234


 44.8438, 65.7279,  
54.1037


 1.6948, 4.3696,  
2.2598

 61.4517, 87.2812,  
73.7621

 0.4530, 1.8824,  
0.7086

 81.7244, 113.0957,  
97.6845

 0.0000, 0.5377,  
0.0000

 106.0272,  
143.5560, 126.2894

 0.0000, 0.0000,  
0.0000

 134.7253,

179.0463, 159.9955

168.1842,  
219.9512, 199.2212

■ 13.3545, 22.7920,  
16.5274

■ 13.3545, 22.7920,  
16.5274

■ 13.3549, 22.7928,  
16.5275

■ 13.7948, 22.9915,  
17.8150

■ 14.3895, 23.2685,  
19.1797

■ 15.2062, 23.6584,  
20.6263

■ 16.2713, 24.1747,  
22.1569

■ 17.6074, 24.8291,  
23.7737

■ 19.2345, 25.6318,  
25.4787

■ 21.1704, 26.5921,  
27.2736

■ 23.4319, 27.7185,  
29.1603

■ 26.0341, 29.0189,  
31.1403

# Harmonies

## Analogous

The Analogous color harmony consists of three colors that are next to each other on the color wheel.



15.6022, 22.7920, 8.6627



13.3545, 22.7920, 16.5274



13.1023, 22.7920, 30.9512

# Triad

The Triadic color harmony groups three colors that are evenly spaced from another and form a triangle on the color wheel.



13.3545, 22.7920, 16.5274



23.7108, 22.7920, 66.0438



30.3015, 22.7920, 10.0943

# Complementary

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



13.3545, 22.7920, 16.5274



13.0915, 6.6897, 3.2913

# Split Complementary

Split-complementary colors differ from the complementary color scheme. The scheme consists of three colors, the original color and two neighbors of the complement color.



33.3191, 22.7920, 19.5514



13.3545, 22.7920, 16.5274



29.1198, 22.7920, 54.0073

# Square

The Square scheme is like the rectangle color scheme, but the four colors are evenly spaced on the color wheel.



13.3545, 22.7920, 16.5274



18.5331, 22.7920, 64.1352



32.8544, 22.7920, 35.4968



25.1271, 22.7920, 6.1374



# Rectangle

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



13.3545, 22.7920, 16.5274



14.0423, 22.7920, 43.2864



32.8544, 22.7920, 35.4968



31.6371, 22.7920, 12.5282

# Sweetspot

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



13.3551, 22.7929, 16.5279



37.1407, 46.8185, 47.9371



12.1025, 22.4300, 3.6917



7.9315, 10.2270, 10.3536



71.1368, 74.8414, 81.5023



11.3376, 11.9280, 12.9896



# Same Dimension

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



13.3551, 22.7929, 16.5279



23.4860, 40.1901, 28.7365



12.5268, 16.2451, 31.3307



5.8875, 6.5316, 7.0187



11.0907, 18.9091, 13.7853



0.1491, 0.2368, 0.2390



# Inverse Universe

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



13.0915, 6.6897, 3.2913



23.0318, 11.7769, 5.4356



12.9818, 7.2915, 0.7233



5.8712, 5.8435, 6.4279



10.8704, 5.5532, 2.7987



0.1452, 0.0728, 0.0982



# Previews

## White Background



This preview shows how the XYZ color 13.3545, 22.7920, 16.5274 looks on a white background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA × Fail

Large Text (above 18pt) WCAG AAA × Fail

Any Text WCAG AAA × Fail



# Black Background



This preview shows how the XYZ color 13.3545, 22.7920, 16.5274 looks on a black 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 × Fail

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

# XYZ 13.3545, 22.7920, 16.5274

## Background



This preview shows how black text looks on a background with the XYZ color 13.3545, 22.7920, 16.5274.



This preview shows how white text looks on a background with the XYZ color 13.3545, 22.7920,



# 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

13.3545, 22.7920, 16.5274

### Protanopia

20.8182, 22.3489, 13.8062

### Deuteranopia

22.9301, 22.5837, 17.3379



## Tritanopia

17.1041, 22.7153, 34.4934

# Trichromacy



## Original Color

13.3545, 22.7920, 16.5274



## Protanomaly

15.2232, 20.8782, 14.5368



## Deuteranomaly

16.0894, 20.8553, 16.8132



## Tritanomaly

15.3185, 22.6424, 26.8556

# Monochromacy



## Original Color

13.3545, 22.7920, 16.5274



## Achromatopsia

12.1130, 12.7438, 13.8780



## Achromatomaly

10.9417, 14.9864, 14.6279

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 13.3545, 22.7920, 16.5274 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(0, 150, 103)` looks like.

```
.text, #text, p{  
    color:rgb(0, 150, 103)  
}
```

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(0, 150, 103) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(0, 150, 103) }
```

## Border

The CSS property to change the border of an element to XYZ 13.3545, 22.7920, 16.5274 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(0, 150, 103) }
```



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

```
.border{ border-color:rgb(0, 150, 103) }
```

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

Here you see how a box with a 4 pixel `rgb(0, 150, 103)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(0, 150, 103); -webkit-box-  
shadow:4px 4px 4px 4px rgb(0, 150, 103);  
box-shadow:4px 4px 4px 4px rgb(0, 150,  
103) }
```

# Background

The CSS property to change the background color of an element to XYZ 13.3545, 22.7920, 16.5274 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(0, 150, 103) }
```

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

```
.background{ background-color: rgb(0, 150,  
103) }
```

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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