

# Converting Colors

XYZ(19.9852, 32.5431, 28.7979)

Have a look what the booklet for  
XYZ(19.9852, 32.5431, 28.7979)  
contains.

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# Color

**XYZ(19.9969, 32.5442,  
28.8946)**

# Conversions

## Conversions Part 1

Format	Color
Hex	0CAF89
RGB	12, 175, 137
RGB Percent	5%, 69%, 54%
CMY	0.9529, 0.3137, 0.4627
CMYK	0.93, 0.00, 0.22, 0.31
HSL	166°, 87%, 37%
HSV	166°, 93%, 69%
XYZ	19.9969, 32.5442, 28.8946
YIQ	121.9310, -84.9500, -46.3740

# Conversions

## Conversions Part 2

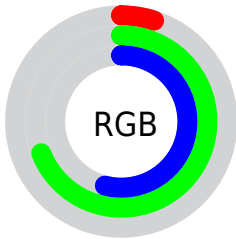
<b>Format</b>	<b>Color</b>
<b>RYB</b>	12, 104, 175
Decimal	831369
CIELab	63.79, -46.54, 9.05
CIELCh	64, 47.414, 169.002
Yxy	32.5442, 0.2456, 0.3996
Android (android.graphics.Color)	4279021449 (0xFF0CAF89)
YUV	121.9310, 7.4290, -96.4095
Hunter-Lab	57.0475, -37.2635, 9.9029

# Details

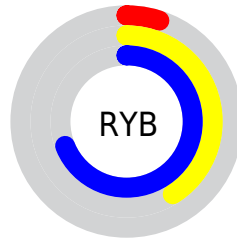
The XYZ color **19.9969, 32.5442, 28.8946** is a dark color, and the websafe version is hex **009966**. A complement of this color would be **18.3875, 9.6080, 3.9049**, and the grayscale version is **18.4744, 19.4365, 21.1663**.

A 20% lighter version of the original color is **42.6940, 63.3563, 58.6940**, and **8.5577, 14.3629, 11.3381** is the 20% darker color. If you saturate the color by 10%, you get **19.6476, 32.3878, 27.8434**, and if you desaturate by 10%, it is **20.6657, 32.8553, 30.4837**.

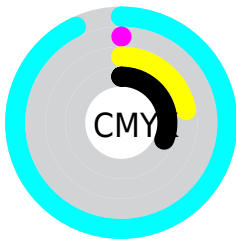
# Distribution



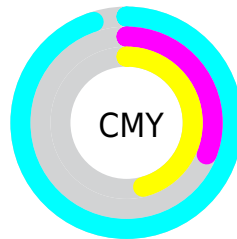
- Red (5%)
- Green (69%)
- Blue (54%)



- Red (5%)
- Yellow (41%)
- Blue (69%)



- Cyan (93%)
- Magenta (0%)
- Yellow (22%)
- Black (31%)




- Cyan (95%)
- Magenta (31%)
- Yellow (46%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 19.9969, 32.5442, 28.8946 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 19.9969, 32.5442, 28.8946 by changing the saturation by 10% instead.





 19.9969, 32.5442,  
28.8946


 19.9969, 32.5442,  
28.8946


244.7322,  
313.5908, 310.7627


 12.5010, 21.7775,  
18.7562


 42.9160, 63.6633,  
58.9498


 7.1605, 13.6935,  
11.3192

 59.0699, 84.7844,  
79.7036


 3.6099, 7.9078,  
6.1651


 78.8405, 110.1258,  
104.8331

 1.4839, 4.0360,  
2.8753

 102.5933,  
140.0719, 134.7566

 0.3148, 1.6937,  
1.0313

 130.6935,  
175.0071, 169.8928

 0.0000, 0.4196,  
0.0000

 163.5064,

 0.0000, 0.0000,

215.3157, 210.6602

0.0000

201.3976,  
261.3821, 257.4773

■ 19.9969, 32.5442,  
28.8946

■ 19.9969, 32.5442,  
28.8946

■ 19.6476, 32.3878,  
27.8434

■ 20.6657, 32.8553,  
30.4837

■ 21.6269, 33.3151,  
32.1442

■ 22.9227, 33.9460,  
33.8794

■ 24.5880, 34.7662,  
35.6915

■ 26.6530, 35.7909,  
37.5825

■ 29.1446, 37.0344,  
39.5542

■ 32.0876, 38.5091,  
41.6085

■ 35.5047, 40.2269,  
43.7469

■ 39.4170, 42.1986,  
45.9710

# Harmonies

## Analogous

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



22.2467, 32.5442, 16.4238



19.9969, 32.5442, 28.8946



20.3444, 32.5442, 48.7532

# Triad

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



19.9969, 32.5442, 28.8946



35.2874, 32.5442, 82.5928



40.1071, 32.5442, 14.3521

# Complementary

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



19.9969, 32.5442, 28.8946



18.3875, 9.6080, 3.9049

# 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.



44.6736, 32.5442, 24.7944



19.9969, 32.5442, 28.8946



41.6271, 32.5442, 65.3160

# Square

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



19.9969, 32.5442, 28.8946



28.5552, 32.5442, 84.9414



45.2667, 32.5442, 42.8949



33.4378, 32.5442, 10.2652



# Rectangle

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



19.9969, 32.5442, 28.8946



22.0174, 32.5442, 63.8565



45.2667, 32.5442, 42.8949



41.9775, 32.5442, 17.0167

# Sweetspot

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



19.9978, 32.5455, 28.8954



54.5431, 67.5003, 72.5301



16.7146, 31.3669, 5.5218



11.6453, 14.7636, 15.7773



84.5950, 89.0005, 96.9216



16.2198, 17.0645, 18.5832



# Same Dimension

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



19.9978, 32.5455, 28.8954



35.0989, 57.9682, 49.4017



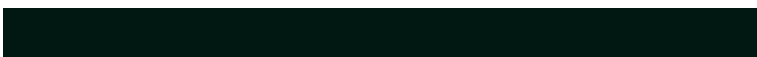
16.0789, 19.5514, 43.4852



8.1552, 9.0397, 9.8425



14.0943, 23.2030, 20.0679



0.4113, 0.6532, 0.6596



# Inverse Universe

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



18.3875, 9.6080, 3.9049



32.3034, 16.5790, 4.8553



19.1353, 11.9189, 1.6403



8.0789, 8.0448, 8.7264



12.9652, 6.6486, 2.1962

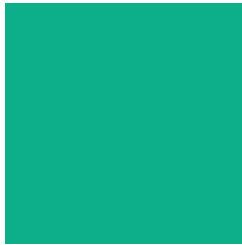


0.3815, 0.1933, 0.1709



# Previews

## White Background



This preview shows how the XYZ color 19.9969, 32.5442, 28.8946 looks on a white 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



# Black Background



This preview shows how the XYZ color 19.9969, 32.5442, 28.8946 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

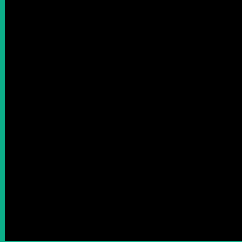
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA ✓ Pass

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

**XYZ 19.9969, 32.5442, 28.8946**

## **Background**



This preview shows how black text looks on a background with the XYZ color 19.9969, 32.5442, 28.8946.



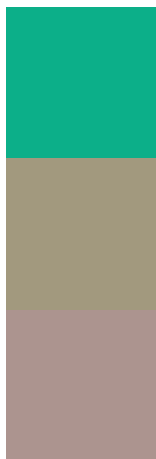
This preview shows how white text looks on a background with the XYZ color 19.9969, 32.5442,



# 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

19.9969, 32.5442, 28.8946

### Protanopia

30.0574, 31.9702, 24.3253

### Deuteranopia

32.5611, 31.9336, 30.4343



## Tritanopia

24.3108, 32.6071, 49.8122

# Trichromacy



## Original Color

19.9969, 32.5442, 28.8946



## Protanomaly

22.8375, 30.2272, 25.7499



## Deuteranomaly

23.9740, 29.9542, 29.7175



## Tritanomaly

22.2825, 32.3103, 41.1385

# Monochromacy



## Original Color

19.9969, 32.5442, 28.8946



## Achromatopsia

18.4984, 19.4618, 21.1939



## Achromatomaly

16.8353, 22.3759, 23.5103

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 19.9969, 32.5442, 28.8946 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(12, 175, 137)` looks like.

```
.text, #text, p{  
    color:rgb(12, 175, 137)  
}
```

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(12, 175, 137) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(12, 175, 137) }
```

## Border

The CSS property to change the border of an element to XYZ 19.9969, 32.5442, 28.8946 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(12, 175, 137) }
```



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

```
.border{ border-color:rgb(12, 175, 137) }
```

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

Here you see how a box with a 4 pixel `rgb(12, 175, 137)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(12, 175, 137); -webkit-box-  
shadow:4px 4px 4px 4px rgb(12, 175, 137);  
box-shadow:4px 4px 4px 4px rgb(12, 175,  
137) }
```

# Background

The CSS property to change the background color of an element to XYZ 19.9969, 32.5442, 28.8946 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(12, 175, 137) }
```

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

```
.background{ background-color: rgb(12, 175,  
137) }
```

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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