

# Converting Colors

XYZ(12.9074, 18.2498, 44.7941)

Have a look what the booklet for  
XYZ(12.9074, 18.2498, 44.7941)  
contains.

<b>XYZ(16.4234, 19.9894, 45.1122)</b> .....	3
<i><b>Conversions</b></i> .....	4
<i><b>Details</b></i> .....	6
<i><b>Harmonies</b></i> .....	12
<i><b>Previews</b></i> .....	24
<i><b>Color Blindness Simulation</b></i> .....	28
<i><b>CSS Examples</b></i> .....	31

# Color

**XYZ(16.4234, 19.9894,  
45.1122)**

# Conversions

## Conversions Part 1

<b>Format</b>	<b>Color</b>
Hex	0085B2
RGB	0, 133, 178
RGB Percent	0%, 52%, 70%
CMY	0.9999, 0.4784, 0.3020
CMYK	1.00, 0.25, 0.00, 0.30
HSL	195°, 100%, 35%
HSV	195°, 100%, 70%
XYZ	16.4234, 19.9894, 45.1122
YIQ	98.3630, -93.7130, -14.2010

# Conversions

## Conversions Part 2

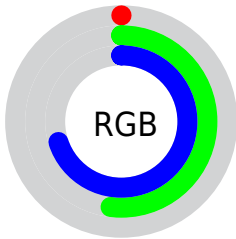
<b>Format</b>	<b>Color</b>
<b>RYB</b>	0, 76, 178
Decimal	34226
CIELab	51.83, -13.86, -32.16
CIELCh	52, 35.018, 246.686
Yxy	19.9894, 0.2015, 0.2452
Android (android.graphics.Color)	4278224306 (0xFF0085B2)
YUV	98.3630, 39.2610, -86.2644
Hunter-Lab	44.7095, -12.6722, -28.5274

# Details

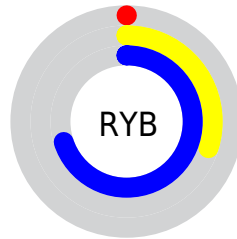
The XYZ color **16.4234, 19.9894, 45.1122** is a dark color, and the websafe version is hex **0099CC**. A complement of this color would be **19.3001, 11.3444, 1.1734**, and the grayscale version is **11.6245, 12.2299, 13.3183**.

A 20% lighter version of the original color is **36.8238, 43.3336, 84.2653**, and **6.8720, 7.8213, 20.5495** is the 20% darker color. If you saturate the color by 10%, you get **16.4225, 19.9875, 45.1123**, and if you desaturate by 10%, it is **17.2995, 21.3758, 45.3340**.

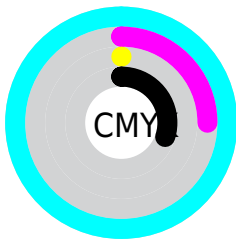
# Distribution



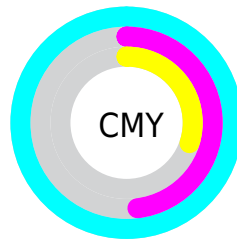
- Red (0%)
- Green (52%)
- Blue (70%)



- Red (0%)
- Yellow (30%)
- Blue (70%)



- Cyan (100%)
- Magenta (25%)
- Yellow (0%)
- Black (30%)



- Cyan (100%)
- Magenta (48%)
- Yellow (30%)

# Brightness & Saturation Gradients

These gradients show how the XYZ color 16.4234, 19.9894, 45.1122 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 16.4234, 19.9894, 45.1122 by changing the saturation by 10% instead.



■ 16.4234, 19.9894,  
45.1122

■ 16.4234, 19.9894,  
45.1122

■ 225.0489,  
251.8577, 383.4012

■ 9.9170, 12.3873,  
31.2022

■ 36.8832, 43.3994,  
84.2090

■ 5.4058, 7.0080,  
20.4931

■ 51.5674, 59.9762,  
110.2329

■ 2.5245, 3.4671,  
12.5664

■ 69.7082, 80.3132,  
141.1318

■ 0.9076, 1.3802,  
7.0034

■ 91.6709, 104.7951,  
177.3243

■ 0.0000, 0.2021,  
3.3858

■ 117.8210,  
133.8060, 219.2290

■ 0.0000, 0.0000,  
1.2948

■ 148.5238,

■ 0.0000, 0.0000,

167.7305, 267.2643

0.0575

184.1447,  
206.9530, 321.8489

■ 0.0000, 0.0000,  
0.0000

■ 16.4234, 19.9894,  
45.1122

■ 16.4234, 19.9894,  
45.1122

■ 16.4225, 19.9875,  
45.1123

■ 17.2995, 21.3758,  
45.3340

■ 18.4243, 22.9298,  
45.5747

■ 19.8838, 24.6965,  
45.8388

■ 21.7190, 26.6975,  
46.1283

■ 23.9647, 28.9512,  
46.4449

■ 26.6513, 31.4737,  
46.7902

■ 29.8065, 34.2796,  
47.1655

■ 33.4554, 37.3825,  
47.5721

■ 37.6213, 40.7947,  
48.0112

# Harmonies

## Analogous

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



14.0335, 19.9894, 35.6611



16.4234, 19.9894, 45.1122



19.8054, 19.9894, 47.5333

# Triad

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



16.4234, 19.9894, 45.1122



26.6189, 19.9894, 19.5669



15.2054, 19.9894, 9.5492

# Complementary

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



16.4234, 19.9894, 45.1122



19.3001, 11.3444, 1.1734

# 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.



18.2154, 19.9894, 7.5484



16.4234, 19.9894, 45.1122



25.0170, 19.9894, 12.0487

# Square

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



16.4234, 19.9894, 45.1122



25.9842, 19.9894, 30.4567



21.8314, 19.9894, 8.2941



13.3939, 19.9894, 14.9076



# Rectangle

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



16.4234, 19.9894, 45.1122



22.2334, 19.9894, 44.3261



21.8314, 19.9894, 8.2941



16.0951, 19.9894, 8.5523

# Sweetspot

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



16.4241, 19.9901, 45.1127



53.7215, 61.8761, 85.4930



16.3855, 32.0271, 7.7532



11.3543, 13.2270, 18.8769



86.6293, 91.1408, 99.2523



17.0014, 17.8868, 19.4787



# Same Dimension

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



16.4241, 19.9901, 45.1127



29.5883, 35.8605, 81.7435



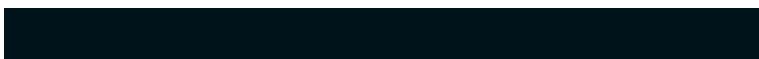
8.9568, 5.0554, 42.6236



8.5571, 9.2604, 10.8428



11.8025, 14.4054, 32.2955



0.4147, 0.5399, 1.0306



# Inverse Universe

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



22.5944, 11.1593, 23.1540



40.8742, 20.1959, 41.4700



26.8178, 26.3799, 3.6793



8.7564, 8.6093, 10.2156



16.1920, 7.9944, 16.7030



0.5313, 0.2603, 0.6407



# Previews

## White Background



This preview shows how the XYZ color 16.4234, 19.9894, 45.1122 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 16.4234, 19.9894, 45.1122 looks on a black background.

## Color Contrast Check

Large Text (above 18pt) WCAG AA ✓ Pass

Any Text WCAG AA ✓ Pass

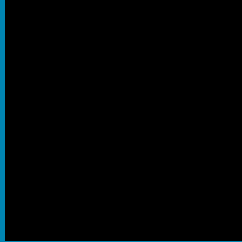
Large Text (above 18pt) WCAG AAA ✓ Pass

Any Text WCAG AAA × Fail

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

# XYZ 16.4234, 19.9894, 45.1122

## Background



This preview shows how black text looks on a background with the XYZ color 16.4234, 19.9894, 45.1122.



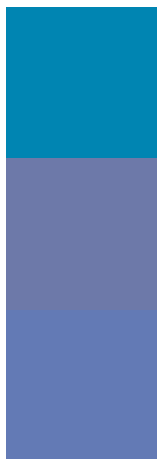
This preview shows how white text looks on a background with the XYZ color 16.4234, 19.9894,



# 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

16.4234, 19.9894, 45.1122

### Protanopia

20.3055, 19.7905, 40.2859

### Deuteranopia

20.4456, 19.9079, 46.4811



## Tritanopia

14.2121, 19.9979, 30.7147

# Trichromacy



## Original Color

16.4234, 19.9894, 45.1122

## Protanomaly

17.2343, 18.9110, 41.7716

## Deuteranomaly

17.7490, 19.2738, 45.9648

## Tritanomaly

14.9757, 20.0769, 35.4337

# Monochromacy



## Original Color

16.4234, 19.9894, 45.1122

## Achromatopsia

11.6093, 12.2139, 13.3009

## Achromatomaly

11.5018, 13.9253, 22.1603

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 16.4234, 19.9894, 45.1122 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, 133, 178)` looks like.

```
.text, #text, p{  
    color:rgb(0, 133, 178)  
}
```

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, 133, 178) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(0, 133, 178) }
```

## Border

The CSS property to change the border of an element to XYZ 16.4234, 19.9894, 45.1122 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, 133, 178) }
```



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

```
.border{ border-color:rgb(0, 133, 178) }
```

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

Here you see how a box with a 4 pixel rgb(0, 133, 178) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(0, 133, 178); -webkit-box-  
shadow:4px 4px 4px 4px rgb(0, 133, 178);  
box-shadow:4px 4px 4px 4px rgb(0, 133,  
178) }
```

# Background

The CSS property to change the background color of an element to XYZ 16.4234, 19.9894, 45.1122 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(0, 133, 178) }
```

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

```
.background{ background-color: rgb(0, 133,  
178) }
```

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](#).

# Hey! You found this booklet interesting? Support Converting Colors with the new Membership Option!

The pro membership hides all ads, plus gives you double the colors in the color bucket, and more awesome pro features!

**[Learn more, Memberships starting at \\$2.50/m!](#)**

**Follow me  
on Twitter!**

@ConvertingColor