

# Converting Colors

XYZ(45.9847, 68.6169, 31.3001)

Have a look what the booklet for  
XYZ(45.9847, 68.6169, 31.3001)  
contains.

<b>XYZ(45.9724, 68.6369, 31.2473)</b> .....	3
<b><i>Conversions</i></b> .....	4
<b><i>Details</i></b> .....	6
<b><i>Harmonies</i></b> .....	12
<b><i>Previews</i></b> .....	24
<b><i>Color Blindness Simulation</i></b> .....	28
<b><i>CSS Examples</i></b> .....	31

# Color

**XYZ(45.9724, 68.6369,  
31.2473)**

# Conversions

## Conversions Part 1

Format	Color
Hex	90EE80
RGB	144, 238, 128
RGB Percent	56%, 93%, 50%
CMY	0.4353, 0.0666, 0.4980
CMYK	0.39, 0.00, 0.46, 0.07
HSL	111°, 76%, 72%
HSV	111°, 46%, 93%
XYZ	45.9724, 68.6369, 31.2473
YIQ	197.3540, -20.7140, -54.1380

# Conversions

## Conversions Part 2

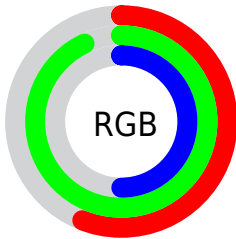
<b>Format</b>	<b>Color</b>
<a href="#">RYB</a>	<a href="#">128, 238, 222</a>
Decimal	<a href="#">9498240</a>
CIELab	<a href="#">86.32, -48.57, 44.50</a>
CIELCh	<a href="#">86, 65.870, 137.502</a>
Yxy	<a href="#">68.6369, 0.3152, 0.4706</a>
Android (android.graphics.Color)	<a href="#">4287688320</a> ( <a href="#">0xFF90EE80</a> )
YUV	<a href="#">197.3540, -34.1915, -46.7915</a>
Hunter-Lab	<a href="#">82.8474, -45.9325, 35.6309</a>

# Details

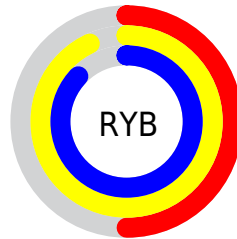
The XYZ color **45.9724, 68.6369, 31.2473** is a light color, and the websafe version is hex **99FF99**. A complement of this color would be **53.2793, 37.1432, 85.2539**, and the grayscale version is **53.4957, 56.2817, 61.2908**.

A 20% lighter version of the original color is **68.5606, 87.4540, 57.5227**, and **21.7589, 35.5958, 12.5613** is the 20% darker color. If you saturate the color by 10%, you get **41.3482, 66.4154, 23.7909**, and if you desaturate by 10%, it is **51.6074, 71.3412, 40.6717**.

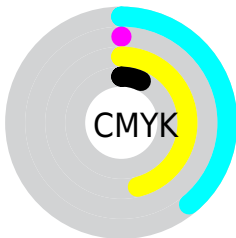
# Distribution



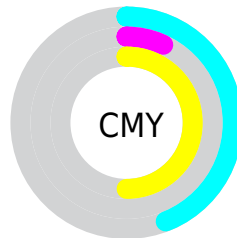
- Red (56%)
- Green (93%)
- Blue (50%)



- Red (50%)
- Yellow (93%)
- Blue (87%)



- Cyan (39%)
- Magenta (0%)
- Yellow (46%)
- Black (7%)




- Cyan (44%)
- Magenta (7%)
- Yellow (50%)


# Brightness & Saturation Gradients

These gradients show how the XYZ color 45.9724, 68.6369, 31.2473 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 45.9724, 68.6369, 31.2473 by changing the saturation by 10% instead.





 45.9724, 68.6369,  
31.2473

 45.9724, 68.6369,  
31.2473


361.4155,  
455.7493, 322.0624


 32.4286, 50.4161,  
20.5272


 83.4058, 117.2628,  
62.7133

 21.8462, 35.7441,  
12.5910


 108.0261,  
148.4367, 84.2964

 13.8599, 24.2366,  
7.0201


 137.0693,  
184.6970, 110.3374

 8.1043, 15.5092,  
3.3960

170.9006,  
226.4282, 141.2551

 4.2141, 9.1776,  
1.3002

209.8856,  
274.0146, 177.4679

 1.8240, 4.8572,  
0.0620

254.3895,

 0.5321, 2.1637,

327.8406, 219.3943

0.0000

304.7777,  
388.2908, 267.4530

■ 0.0000, 0.7001,  
0.0000

■ 0.0000, 0.0000,  
0.0000

■ 45.9724, 68.6369,  
31.2473

■ 45.9724, 68.6369,  
31.2473

■ 41.3482, 66.4154,  
23.7909

■ 51.6074, 71.3412,  
40.6717

■ 37.6693, 64.6397,  
18.1589


■ 58.3035, 74.5452,  
52.1849


■ 34.8703, 63.2816,  
14.1957


■ 66.1136, 78.2759,  
65.9036


■ 32.8749, 62.3056,  
11.7178

■ 75.0857, 82.5557,  
81.9344

 31.5926, 61.6703,  
10.4969

 85.2649, 87.4056,  
100.3771

 31.2560, 61.5025,  
10.2238

 89.8659, 89.6319,  
107.1720

# Harmonies

## Analogous

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



56.8357, 68.6369, 19.9526



45.9724, 68.6369, 31.2473



40.6593, 68.6369, 58.0431

# Triad

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



45.9724, 68.6369, 31.2473



59.1143, 68.6369, 189.8724



97.2725, 68.6369, 52.2796

# Complementary

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



45.9724, 68.6369, 31.2473



53.2793, 37.1432, 85.2539

# 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.



98.1372, 68.6369, 94.3521



45.9724, 68.6369, 31.2473



74.4286, 68.6369, 186.3717

# Square

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



45.9724, 68.6369, 31.2473



47.4164, 68.6369, 155.0040



89.2484, 68.6369, 146.7492



87.0428, 68.6369, 28.4455



# Rectangle

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



45.9724, 68.6369, 31.2473



40.3374, 68.6369, 86.2051



89.2484, 68.6369, 146.7492



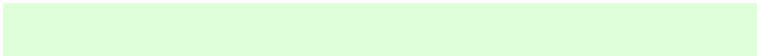
98.7192, 68.6369, 64.3284

# Sweetspot

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



45.9741, 68.6398, 31.2488



79.4789, 92.5763, 80.9051



65.1479, 71.7163, 30.8321



16.5504, 19.5950, 16.4979



0.0000, 0.0000, 0.0000



20.3446, 21.4041, 23.3091



# Same Dimension

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



45.9741, 68.6398, 31.2488



48.8554, 77.9151, 28.6085



46.4077, 68.5130, 47.0975



15.7798, 17.7666, 16.7473



17.5016, 34.3440, 5.7066



1.5211, 2.8907, 0.4778



# Inverse Universe

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



53.2793, 37.1432, 85.2539



58.2825, 37.0193, 98.6814



53.3485, 37.7641, 58.8177



16.2152, 15.9081, 19.9376



22.4948, 10.6019, 45.9886



1.9324, 0.9135, 3.8287



# Previews

## White Background



This preview shows how the XYZ color 45.9724, 68.6369, 31.2473 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 45.9724, 68.6369, 31.2473 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 45.9724, 68.6369, 31.2473**

## **Background**



This preview shows how black text looks on a background with the XYZ color 45.9724, 68.6369, 31.2473.



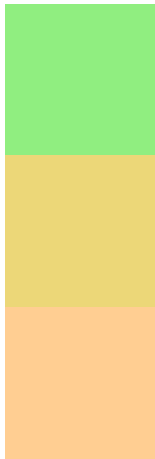
This preview shows how white text looks on a background with the XYZ color 45.9724, 68.6369,



# 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

45.9724, 68.6369, 31.2473

### Protanopia

62.2827, 67.7898, 27.5714

### Deuteranopia

68.4996, 67.4779, 36.6084



## **Tritanopia**

58.6199, 68.3208, 94.8917

# Trichromacy



## Original Color

45.9724, 68.6369, 31.2473



## Protanomaly

54.5914, 66.9019, 28.7750



## Deuteranomaly

57.7559, 66.4540, 34.2089



## Tritanomaly

52.7441, 67.9788, 65.5997

# Monochromacy



## Original Color

45.9724, 68.6369, 31.2473



## Achromatopsia

53.0703, 55.8340, 60.8033



## Achromatomaly

49.3500, 59.5305, 47.9192

# CSS Examples

## Text

The CSS property to change the color of the text to XYZ 45.9724, 68.6369, 31.2473 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(144, 238, 128)` looks like.

```
.text, #text, p{  
    color:rgb(144, 238, 128)  
}
```

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(144, 238, 128) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(144, 238, 128) }
```

## Border

The CSS property to change the border of an element to XYZ 45.9724, 68.6369, 31.2473 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(144, 238, 128) }
```



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

```
.border{ border-color:rgb(144, 238, 128) }
```

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

Here you see how a box with a 4 pixel `rgb(144, 238, 128)` colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(144, 238, 128); -webkit-box-  
shadow:4px 4px 4px 4px rgb(144, 238, 128);  
box-shadow:4px 4px 4px 4px rgb(144, 238,  
128) }
```

# Background

The CSS property to change the background color of an element to XYZ 45.9724, 68.6369, 31.2473 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(144, 238, 128) }
```

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

```
.background{ background-color: rgb(144,  
238, 128) }
```

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