

# Converting Colors

$Y_{xy}(45.4514, 0.5092, 0.4339)$

Have a look what the booklet for  
Yxy(45.4514, 0.5092, 0.4339)  
contains.

<b>Yxy(45.3739, 0.5094, 0.4337)</b> .....	3
<b>Conversions</b> .....	4
<b>Details</b> .....	6
<b>Harmonies</b> .....	12
<b>Previews</b> .....	24
<b>Color Blindness Simulation</b> .....	27
<b>CSS Examples</b> .....	30

# Color

**Yxy(45.3739, 0.5094, 0.4337)**

# Conversions

## Conversions Part 1

Format	Color
Hex	FF9D00
RGB	255, 157, 0
RGB Percent	100%, 62%, 0%
CMY	0.0001, 0.3843, 0.9994
CMYK	0.00, 0.38, 1.00, 0.00
HSL	37°, 100%, 50%
HSV	37°, 100%, 100%
XYZ	53.2937, 45.3739, 5.9529
YIQ	168.4040, 108.8050, -28.0510

# Conversions

## Conversions Part 2

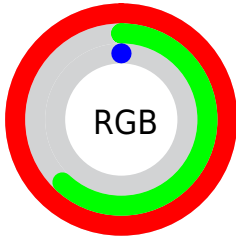
Format	Color
<a href="#">RYB</a>	<a href="#">159, 255, 0</a>
Decimal	<a href="#">16751872</a>
CIELab	<a href="#">73.14, 28.09, 77.78</a>
CIELCh	<a href="#">73, 82.694, 70.143</a>
Yxy	<a href="#">45.3739, 0.5094, 0.4337</a>
Android (android.graphics.Color)	<a href="#">4294941952 (0xFFFF9D00)</a>
YUV	<a href="#">168.4040, -83.0232, 75.9447</a>
Hunter-Lab	<a href="#">67.3602, 23.3445, 41.9124</a>

# Details

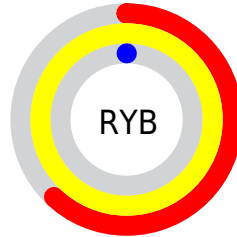
The Yxy color **45.3739, 0.5094, 0.4337** is a dark color, and the websafe version is hex **FF9900**. The color can be described as middle saturated orange. A complement of this color would be **15.9770, 0.1663, 0.1184**, and the grayscale version is **39.7536, 0.3127, 0.3290**.

A 20% lighter version of the original color is **68.8970, 0.4350, 0.4530**, and **21.3096, 0.5274, 0.4195** is the 20% darker color. If you saturate the color by 10%, you get **45.3571, 0.5095, 0.4337**, and if you desaturate by 10%, it is **48.9006, 0.4947, 0.4382**.

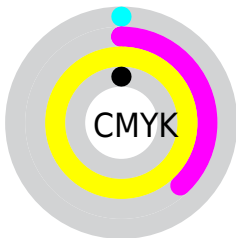
# Distribution



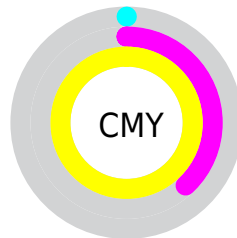
- Red (100%)
- Green (62%)
- Blue (0%)



- Red (62%)
- Yellow (100%)
- Blue (0%)



- Cyan (0%)
- Magenta (38%)
- Yellow (100%)
- Black (0%)




- Cyan (0%)
- Magenta (38%)
- Yellow (100%)


# Brightness & Saturation Gradients

These gradients show how the Yxy color 45.3739, 0.5094, 0.4337 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 Yxy color 45.3739, 0.5094, 0.4337 by changing the saturation by 10% instead.





 45.3739, 0.5094,  
0.4337

 45.3739, 0.5094,  
0.4337


368.2858, 0.4208,  
0.3978


 31.7520, 0.5259,  
0.4364


 83.2812, 0.4811,  
0.4254

 21.1722, 0.5436,  
0.4365


 108.3354, 0.4693,  
0.4208


 13.2499, 0.5653,  
0.4347


 137.9692, 0.4587,  
0.4164

 7.6009, 0.5800,  
0.4200

 172.5670, 0.4494,  
0.4121

 3.8406, 0.6014,  
0.3986

 212.5132, 0.4410,  
0.4081

 1.5848, 0.6352,  
0.3648

 258.1921, 0.4336,

 0.3473, 0.7475,

0.4044

0.2525

309.9881, 0.4269,  
0.4010

0.0000, 0.0000,  
0.0000

45.3739, 0.5094,  
0.4337

45.3739, 0.5094,  
0.4337

45.3571, 0.5095,  
0.4337

48.9006, 0.4947,  
0.4382

52.7917, 0.4767,  
0.4378

57.0839, 0.4558,  
0.4321

61.8006, 0.4332,  
0.4221

66.9620, 0.4101,  
0.4087

■ 72.5863, 0.3875,  
0.3934

■ 78.6903, 0.3662,  
0.3770

■ 85.2895, 0.3465,  
0.3604

■ 92.3986, 0.3286,  
0.3443

# Harmonies

## Analogous

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



45.3739, 0.5353, 0.3566



45.3739, 0.5094, 0.4337



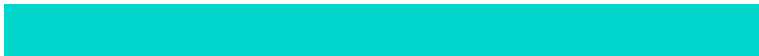
45.3739, 0.4319, 0.5103

# Triad

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



45.3739, 0.5094, 0.4337



45.3739, 0.1608, 0.3456



45.3739, 0.2569, 0.1830

# Complementary

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



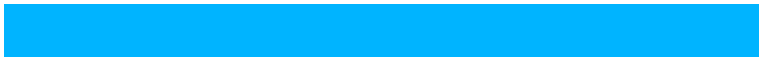
45.3739, 0.5094, 0.4337



15.9770, 0.1663, 0.1184

# 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.



45.3739, 0.1783, 0.1678



45.3739, 0.5094, 0.4337



45.3739, 0.1315, 0.2373

# Square

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



45.3739, 0.5094, 0.4337



45.3739, 0.2322, 0.4816



45.3739, 0.1382, 0.1826



45.3739, 0.3710, 0.2245



# Rectangle

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



45.3739, 0.5094, 0.4337



45.3739, 0.3664, 0.5432



45.3739, 0.1382, 0.1826



45.3739, 0.2261, 0.1749

# Sweetspot

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



45.3763, 0.5094, 0.4337



78.6647, 0.3663, 0.3771



22.2212, 0.5425, 0.2762



16.2741, 0.3751, 0.3840



0.0000, 0.0000, 0.0000



21.4041, 0.3127, 0.3290



# Same Dimension

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



45.3763, 0.5094, 0.4337



45.3631, 0.5095, 0.4337



88.2513, 0.4015, 0.5194



19.8490, 0.3279, 0.3436



24.0012, 0.5076, 0.4352



2.5486, 0.4948, 0.4453



# Inverse Universe

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



15.9770, 0.1663, 0.1184



15.9614, 0.1662, 0.1183



7.4369, 0.1527, 0.0615



18.5226, 0.2979, 0.3140



8.6069, 0.1671, 0.1213



1.0417, 0.1733, 0.1438



# Previews

## White Background



This preview shows how the Yxy color 45.3739, 0.5094, 0.4337 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 Yxy color 45.3739, 0.5094, 0.4337 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](#).

**Yxy 45.3739, 0.5094, 0.4337**

## Background



This preview shows how black text looks on a background with the Yxy color 45.3739, 0.5094, 0.4337.



This preview shows how white text looks on a background with the Yxy color 45.3739, 0.5094, 0.4337.

# 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

45.3739, 0.5094, 0.4337

### Protanopia

45.7913, 0.4375, 0.4854

### Deuteranopia

45.6198, 0.4725, 0.4630



## Tritanopia

45.2581, 0.4103, 0.3188

# Trichromacy



## Original Color

45.3739, 0.5094, 0.4337

## Protanomaly

45.0612, 0.4649, 0.4661

## Deuteranomaly

45.4496, 0.4863, 0.4520

## Tritanomaly

44.6561, 0.4665, 0.3800

# Monochromacy



## Original Color

45.3739, 0.5094, 0.4337

## Achromatopsia

39.1572, 0.3127, 0.3290

## Achromatomaly

39.8918, 0.4009, 0.4023

# CSS Examples

## Text

The CSS property to change the color of the text to Yxy 45.3739, 0.5094, 0.4337 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(255, 157, 0)` looks like.

```
.text, #text, p{  
    color:rgb(255, 157, 0)  
}
```

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(255, 157, 0) colored shadow looks like.

```
.shadow{ text-shadow: 4px 4px 2px rgb(255, 157, 0) }
```

## Border

The CSS property to change the border of an element to Yxy 45.3739, 0.5094, 0.4337 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(255, 157, 0) }
```

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

```
.border{ border-color:rgb(255, 157, 0) }
```

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

Here you see how a box with a 4 pixel rgb(255, 157, 0) colored shadow looks like.

```
.boxshadow{ -moz-box-shadow:4px 4px 4px  
4px rgb(255, 157, 0); -webkit-box-  
shadow:4px 4px 4px 4px rgb(255, 157, 0);  
box-shadow:4px 4px 4px 4px rgb(255, 157,  
0) }
```



# Background

The CSS property to change the background color of an element to Yxy 45.3739, 0.5094, 0.4337 is called "background". The background property can be set on classes, ids or directly on the HTML element.

```
.background, #background, body{  
background: rgb(255, 157, 0) }
```

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

```
.background{ background-color: rgb(255,  
157, 0) }
```

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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