

# Converting Colors - WCAG Matrix

| Web Content Accessibility Guidelines (WCAG) 2.0 - Color Matrix. |                                     |                                    |                                    |                                    |                                    |                                     |                                     |                                     |                                     |
|-----------------------------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|                                                                 | Hex(B38029)                         | Hex(D09A43)                        | Hex(EEB55D)                        | Hex(FFD077)                        | Hex(FFEC91)                        | Hex(FFFAD)                          | Hex(FFFC9)                          | Hex(FFFE5)                          | Hex(FFFFFF)                         |
| Hex(B38029)                                                     |                                     | Ratio: 1.39<br>Failed <sup>5</sup> | Ratio: 1.89<br>Failed <sup>5</sup> | Ratio: 2.41<br>Failed <sup>5</sup> | Ratio: 2.93<br>Failed <sup>5</sup> | Ratio: 3.34<br>AA 18pt <sup>2</sup> | Ratio: 3.38<br>AA 18pt <sup>2</sup> | Ratio: 3.43<br>AA 18pt <sup>2</sup> | Ratio: 3.48<br>AA 18pt <sup>2</sup> |
| Hex(D09A43)                                                     | Ratio: 1.39<br>Failed <sup>5</sup>  |                                    | Ratio: 1.36<br>Failed <sup>5</sup> | Ratio: 1.73<br>Failed <sup>5</sup> | Ratio: 2.11<br>Failed <sup>5</sup> | Ratio: 2.40<br>Failed <sup>5</sup>  | Ratio: 2.43<br>Failed <sup>5</sup>  | Ratio: 2.47<br>Failed <sup>5</sup>  | Ratio: 2.50<br>Failed <sup>5</sup>  |
| Hex(EEB55D)                                                     | Ratio: 1.89<br>Failed <sup>5</sup>  | Ratio: 1.36<br>Failed <sup>5</sup> |                                    | Ratio: 1.28<br>Failed <sup>5</sup> | Ratio: 1.55<br>Failed <sup>5</sup> | Ratio: 1.77<br>Failed <sup>5</sup>  | Ratio: 1.79<br>Failed <sup>5</sup>  | Ratio: 1.81<br>Failed <sup>5</sup>  | Ratio: 1.84<br>Failed <sup>5</sup>  |
| Hex(FFD077)                                                     | Ratio: 2.41<br>Failed <sup>5</sup>  | Ratio: 1.73<br>Failed <sup>5</sup> | Ratio: 1.28<br>Failed <sup>5</sup> |                                    | Ratio: 1.21<br>Failed <sup>5</sup> | Ratio: 1.39<br>Failed <sup>5</sup>  | Ratio: 1.40<br>Failed <sup>5</sup>  | Ratio: 1.42<br>Failed <sup>5</sup>  | Ratio: 1.44<br>Failed <sup>5</sup>  |
| Hex(FFEC91)                                                     | Ratio: 2.93<br>Failed <sup>5</sup>  | Ratio: 2.11<br>Failed <sup>5</sup> | Ratio: 1.55<br>Failed <sup>5</sup> | Ratio: 1.21<br>Failed <sup>5</sup> |                                    | Ratio: 1.14<br>Failed <sup>5</sup>  | Ratio: 1.16<br>Failed <sup>5</sup>  | Ratio: 1.17<br>Failed <sup>5</sup>  | Ratio: 1.19<br>Failed <sup>5</sup>  |
| Hex(FFFAD)                                                      | Ratio: 3.34<br>AA 18pt <sup>2</sup> | Ratio: 2.40<br>Failed <sup>5</sup> | Ratio: 1.77<br>Failed <sup>5</sup> | Ratio: 1.39<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> |                                     | Ratio: 1.01<br>Failed <sup>5</sup>  | Ratio: 1.03<br>Failed <sup>5</sup>  | Ratio: 1.04<br>Failed <sup>5</sup>  |
| Hex(FFFC9)                                                      | Ratio: 3.38<br>AA 18pt <sup>2</sup> | Ratio: 2.43<br>Failed <sup>5</sup> | Ratio: 1.79<br>Failed <sup>5</sup> | Ratio: 1.40<br>Failed <sup>5</sup> | Ratio: 1.16<br>Failed <sup>5</sup> | Ratio: 1.01<br>Failed <sup>5</sup>  |                                     | Ratio: 1.01<br>Failed <sup>5</sup>  | Ratio: 1.03<br>Failed <sup>5</sup>  |
| Hex(FFFE5)                                                      | Ratio: 3.43<br>AA 18pt <sup>2</sup> | Ratio: 2.47<br>Failed <sup>5</sup> | Ratio: 1.81<br>Failed <sup>5</sup> | Ratio: 1.42<br>Failed <sup>5</sup> | Ratio: 1.17<br>Failed <sup>5</sup> | Ratio: 1.03<br>Failed <sup>5</sup>  | Ratio: 1.01<br>Failed <sup>5</sup>  |                                     | Ratio: 1.02<br>Failed <sup>5</sup>  |
| Hex(FFFFFF)                                                     | Ratio: 3.48<br>AA 18pt <sup>2</sup> | Ratio: 2.50<br>Failed <sup>5</sup> | Ratio: 1.84<br>Failed <sup>5</sup> | Ratio: 1.44<br>Failed <sup>5</sup> | Ratio: 1.19<br>Failed <sup>5</sup> | Ratio: 1.04<br>Failed <sup>5</sup>  | Ratio: 1.03<br>Failed <sup>5</sup>  | Ratio: 1.02<br>Failed <sup>5</sup>  |                                     |

Details can be found at <https://www.w3.org/TR/WCAG20/>.

<sup>1</sup> AA

AA level of the Web Content Accessibility Guidelines (WCAG) 2.0 for any text size.

<sup>2</sup> AA 18pt

AA level for large text above 18pt.

<sup>3</sup> AAA

AAA level of the Web Content Accessibility Guidelines (WCAG) 2.0 for any text size.

<sup>4</sup> AAA 18pt

AAA level for large text above 18pt.

<sup>5</sup> Failed

Fails to comply with the Web Content Accessibility Guidelines (WCAG) 2.0.

<sup>6</sup> Passed

Passes the AAA level of the Web Content Accessibility Guidelines (WCAG) 2.0 for all text sizes.