

# Converting Colors - WCAG Matrix

| Web Content Accessibility Guidelines (WCAG) 2.0 - Color Matrix. |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |
|-----------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                                                                 | Hex(4E9494)                        | Hex(5D9494)                        | Hex(6C9494)                        | Hex(7A9494)                        | Hex(899494)                        | Hex(989494)                        | Hex(A79494)                        | Hex(B69494)                        | Hex(C49494)                        | Hex(D39494)                        |
| Hex(4E9494)                                                     |                                    | Ratio: 1.02<br>Failed <sup>5</sup> | Ratio: 1.05<br>Failed <sup>5</sup> | Ratio: 1.08<br>Failed <sup>5</sup> | Ratio: 1.12<br>Failed <sup>5</sup> | Ratio: 1.17<br>Failed <sup>5</sup> | Ratio: 1.22<br>Failed <sup>5</sup> | Ratio: 1.28<br>Failed <sup>5</sup> | Ratio: 1.34<br>Failed <sup>5</sup> | Ratio: 1.41<br>Failed <sup>5</sup> |
| Hex(5D9494)                                                     | Ratio: 1.02<br>Failed <sup>5</sup> |                                    | Ratio: 1.03<br>Failed <sup>5</sup> | Ratio: 1.06<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.19<br>Failed <sup>5</sup> | Ratio: 1.25<br>Failed <sup>5</sup> | Ratio: 1.31<br>Failed <sup>5</sup> | Ratio: 1.38<br>Failed <sup>5</sup> |
| Hex(6C9494)                                                     | Ratio: 1.05<br>Failed <sup>5</sup> | Ratio: 1.03<br>Failed <sup>5</sup> |                                    | Ratio: 1.03<br>Failed <sup>5</sup> | Ratio: 1.07<br>Failed <sup>5</sup> | Ratio: 1.11<br>Failed <sup>5</sup> | Ratio: 1.16<br>Failed <sup>5</sup> | Ratio: 1.21<br>Failed <sup>5</sup> | Ratio: 1.27<br>Failed <sup>5</sup> | Ratio: 1.34<br>Failed <sup>5</sup> |
| Hex(7A9494)                                                     | Ratio: 1.08<br>Failed <sup>5</sup> | Ratio: 1.06<br>Failed <sup>5</sup> | Ratio: 1.03<br>Failed <sup>5</sup> |                                    | Ratio: 1.04<br>Failed <sup>5</sup> | Ratio: 1.08<br>Failed <sup>5</sup> | Ratio: 1.13<br>Failed <sup>5</sup> | Ratio: 1.18<br>Failed <sup>5</sup> | Ratio: 1.23<br>Failed <sup>5</sup> | Ratio: 1.30<br>Failed <sup>5</sup> |
| Hex(899494)                                                     | Ratio: 1.12<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> | Ratio: 1.07<br>Failed <sup>5</sup> | Ratio: 1.04<br>Failed <sup>5</sup> |                                    | Ratio: 1.04<br>Failed <sup>5</sup> | Ratio: 1.09<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.19<br>Failed <sup>5</sup> | Ratio: 1.25<br>Failed <sup>5</sup> |
| Hex(989494)                                                     | Ratio: 1.17<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.11<br>Failed <sup>5</sup> | Ratio: 1.08<br>Failed <sup>5</sup> | Ratio: 1.04<br>Failed <sup>5</sup> |                                    | Ratio: 1.04<br>Failed <sup>5</sup> | Ratio: 1.09<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.21<br>Failed <sup>5</sup> |
| Hex(A79494)                                                     | Ratio: 1.22<br>Failed <sup>5</sup> | Ratio: 1.19<br>Failed <sup>5</sup> | Ratio: 1.16<br>Failed <sup>5</sup> | Ratio: 1.13<br>Failed <sup>5</sup> | Ratio: 1.09<br>Failed <sup>5</sup> | Ratio: 1.04<br>Failed <sup>5</sup> |                                    | Ratio: 1.05<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> | Ratio: 1.15<br>Failed <sup>5</sup> |
| Hex(B69494)                                                     | Ratio: 1.28<br>Failed <sup>5</sup> | Ratio: 1.25<br>Failed <sup>5</sup> | Ratio: 1.21<br>Failed <sup>5</sup> | Ratio: 1.18<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.09<br>Failed <sup>5</sup> | Ratio: 1.05<br>Failed <sup>5</sup> |                                    | Ratio: 1.05<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> |
| Hex(C49494)                                                     | Ratio: 1.34<br>Failed <sup>5</sup> | Ratio: 1.31<br>Failed <sup>5</sup> | Ratio: 1.27<br>Failed <sup>5</sup> | Ratio: 1.23<br>Failed <sup>5</sup> | Ratio: 1.19<br>Failed <sup>5</sup> | Ratio: 1.14<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> | Ratio: 1.05<br>Failed <sup>5</sup> |                                    | Ratio: 1.05<br>Failed <sup>5</sup> |
| Hex(D39494)                                                     | Ratio: 1.41<br>Failed <sup>5</sup> | Ratio: 1.38<br>Failed <sup>5</sup> | Ratio: 1.34<br>Failed <sup>5</sup> | Ratio: 1.30<br>Failed <sup>5</sup> | Ratio: 1.25<br>Failed <sup>5</sup> | Ratio: 1.21<br>Failed <sup>5</sup> | Ratio: 1.15<br>Failed <sup>5</sup> | Ratio: 1.10<br>Failed <sup>5</sup> | Ratio: 1.05<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.