

[MS-CSS3COLR]:

Internet Explorer CSS Color Module Level 3 Standards Support

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Revision Summary

Date	Revision History	Revision Class	Comments
12/7/2011	1.0	New	Released new document.
2/22/2012	1.1	Minor	Clarified the meaning of the technical content.
7/25/2012	1.2	Minor	Clarified the meaning of the technical content.
6/26/2013	2.0	Major	Significantly changed the technical content.
3/31/2014	2.0	None	No changes to the meaning, language, or formatting of the technical content.
1/22/2015	3.0	Major	Updated for new product version.
7/7/2015	3.1	Minor	Clarified the meaning of the technical content.
11/2/2015	3.1	None	No changes to the meaning, language, or formatting of the technical content.
3/22/2016	3.1	None	No changes to the meaning, language, or formatting of the technical content.
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1 Introduction

This document describes the level of support provided by Microsoft web browsers for the *CSS3 Color Module* specification, published 07 June 2011.

1.1 Glossary

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the [Errata](#).

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.

[CSS-Level2-2009] World Wide Web Consortium, "Cascading Style Sheets Level 2 Revision 1 (CSS 2.1) Specification", W3C Candidate Recommendation 08 September 2009, <http://www.w3.org/TR/2009/CR-CSS2-20090908/>

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[W3C-CSS3-Color] World Wide Web Consortium, "CSS Color Module Level 3", W3C Recommendation 07 June 2011, <http://www.w3.org/TR/css3-color/>

1.2.2 Informative References

None.

1.3 Microsoft Implementations

The following Microsoft web browser versions implement some portion of the CSS specification:

- Windows Internet Explorer 7
- Windows Internet Explorer 8
- Windows Internet Explorer 9
- Windows Internet Explorer 10
- Internet Explorer 11
- Internet Explorer 11 for Windows 10
- Microsoft Edge

Each browser version may implement multiple document rendering modes. The modes vary from one another in support of the standard. The following table lists the document modes supported by each browser version.

Browser Version	Document Modes Supported
Internet Explorer 7	Quirks Mode Standards Mode
Internet Explorer 8	Quirks Mode IE7 Mode IE8 Mode
Internet Explorer 9	Quirks Mode IE7 Mode IE8 Mode IE9 Mode
Internet Explorer 10	Quirks Mode IE7 Mode IE8 Mode IE9 Mode IE10 Mode
Internet Explorer 11	Quirks Mode IE7 Mode IE8 Mode IE9 Mode IE10 Mode IE11 Mode
Internet Explorer 11 for Windows 10	Quirks Mode IE7 Mode IE8 Mode IE9 Mode IE10 Mode IE11 Mode
Microsoft Edge	EdgeHTML Mode

For each variation presented in this document there is a list of the document modes and browser versions that exhibit the behavior described by the variation. All combinations of modes and versions that are not listed conform to the specification. For example, the following list for a variation indicates that the variation exists in three document modes in all browser versions that support these modes:

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

Note: "Standards Mode" in Internet Explorer 7 and "IE7 Mode" in Internet Explorer 8 refer to the same document mode. "IE7 Mode" is the preferred way of referring to this document mode across all versions of the browser.

1.4 Standards Support Requirements

To conform to [\[W3C-CSS3-Color\]](#) a user agent must implement all required portions of the specification. Any optional portions that have been implemented must also be implemented as

described by the specification. Normative language is usually used to define both required and optional portions. (For more information, see [\[RFC2119\]](#).)

1.5 Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and extension points.

Notation	Explanation
C####	Identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications.
V####	Identifies an intended point of variability in the target specification such as the use of MAY, SHOULD, or RECOMMENDED. (See [RFC2119] .) This does not include extensibility points.
E####	Identifies extensibility points (such as optional implementation-specific data) in the target specification, which can impair interoperability.

For document mode and browser version notation, see section [1.3](#).

2 Standards Support Statements

This section contains all variations and clarifications for the Microsoft implementation of [\[CSS-Level2-2009\]](#).

- Section [2.1](#) describes normative variations from the MUST requirements of the specification.
- Section [2.2](#) describes clarifications of the MAY and SHOULD requirements.
- Section [2.3](#) considers error handling aspects of the implementation.
- Section [2.4](#) considers security aspects of the implementation.

2.1 Normative Variations

The following subsections describe normative variations from the MUST requirements of [\[W3C-CSS3-Color\]](#).

2.1.1 [W3C-CSS3-Color] Section 3.1, Foreground color: the 'color' property

V0001:

The specification states:

```
Name: color
Value: <color> | inherit
Initial: depends on user agent
Applies to: all elements
Inherited: yes
Percentages: N/A
Media: visual
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **transparent**, **currentColor**, and **inherit** keywords are not supported.

V0002:

The specification states:

```
The computed value of the keyword 'transparent' is the quadruplet of all zero numerical RGBA values, e.g. rgba(0,0,0,0). See the definition of the 'currentColor' for how its computed value is determined. For all other values, the computed value is the specified value.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **transparent** keyword is not supported.

2.1.2 [W3C-CSS3-Color] Section 3.2, Transparency: the 'opacity' property

V0003:

The specification states:

```
Name: opacity
Value: <alphavalue> | inherit
```

Initial: 1
Applies to: all elements
Inherited: no
Percentages: N/A
Media: visual
Computed value: The same as the specified value after clipping the <alphavalue> to the range [0.0,1.0].

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **opacity** property is not supported.

2.1.3 [W3C-CSS3-Color] Section 4.2.1, RGB color values

V0005:

The specification states:

The format of an RGB value in the functional notation is 'rgb(' followed by a comma-separated list of three numerical values (either three integer values or three percentage values) followed by ')'. The integer value 255 corresponds to 100%, and to F or FF in the hexadecimal notation:
rgb(255,255,255) = rgb(100%,100%,100%) = #FFF.
White space characters are allowed around the numerical values.

Quirks Mode and IE7 Mode (All Versions)

Signed RGB values are not supported.

IE8 Mode (Internet Explorer 8)

Signed RGB values are not supported.

2.1.4 [W3C-CSS3-Color] Section 4.2.2, RGBA color values

V0006:

The specification states:

The format of an RGBA value in the functional notation is 'rgba(' followed by a comma-separated list of three numerical values (either three integer values or three percentage values), followed by an <alphavalue>, followed by ')'. The integer value 255 corresponds to 100%, rgba(255,255,255,0.8) = rgba(100%,100%,100%,0.8).
White space characters are allowed around the numerical values.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

RGBA color values are not supported.

V0007:

The specification states:

Implementations must clip the red, green, and blue components of RGBA color values to the device gamut according to the rules for the RGB color value composed of those components.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

RGBA color values are not supported.

2.1.5 [W3C-CSS3-Color] Section 4.2.3, 'transparent' color keyword

V0008:

The specification states:

```
transparent
Fully transparent. This keyword can be considered a shorthand for transparent
black, rgba(0,0,0,0), which is its computed value.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **transparent** keyword is not supported.

2.1.6 [W3C-CSS3-Color] Section 4.2.4, HSL color values

V0009:

The specification states:

```
HSL colors are encoding as a triple (hue, saturation, lightness). Hue is
represented as an angle of the color circle (i.e. the rainbow represented in a
circle). This angle is so typically measured in degrees that the unit is implicit
in CSS; syntactically, only a <number> is given.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

HSL color values are not supported.

2.1.7 [W3C-CSS3-Color] Section 4.2.5, HSLA color values

V0010:

The specification states:

```
The format of an HSLA color value in the functional notation is 'hsla(' followed by
the hue in degrees, saturation and lightness as a percentage, and an <alphavalue>,
followed by ')'. White space characters are allowed around the numerical values.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

HSLA color values are not supported.

V0011:

The specification states:

```
Implementations must clip the hue, saturation, and lightness components of HSLA color values
to the device gamut according to the rules for the HSL color value composed of those
components.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

HSLA color values are not supported.

2.1.8 [W3C-CSS3-Color] Section 4.4, 'currentColor' color keyword

V0012:

The specification states:

```
currentColor
The value of the 'color' property. The computed value of the 'currentColor' keyword
is the computed value of the 'color' property. If the 'currentColor' keyword is set
on the 'color' property itself, it is treated as 'color:inherit' at parse time.
```

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **currentColor** keyword is not supported.

2.2 Clarifications

There are no clarifications of the MAY and SHOULD requirements of [\[W3C-CSS3-Color\]](#).

2.3 Error Handling

There are no additional error handling considerations.

2.4 Security

There are no additional security considerations.

3 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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