

Colorimetric transformation $i = 5$

$c_j^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

rgb → *cmy0**_e

The figure is a heatmap illustrating the conversion from RGB to CMYK color space. The x-axis represents the CMYK value, ranging from 0.0 (dark gray) to 1.0 (white). The y-axis represents the RGB value, also ranging from 0.0 to 1.0. The color intensity of each cell in the grid indicates the corresponding CMYK value for a given RGB input.

| CMYK (x) | RGB (y) | CMYK Value |
|----------|---------|------------|
| 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.0 |
| 0.0 | 0.5 | 0.5 |
| 0.0 | 0.75 | 0.75 |
| 0.0 | 1.0 | 1.0 |
| 0.25 | 0.0 | 0.0 |
| 0.25 | 0.25 | 0.25 |
| 0.25 | 0.5 | 0.5 |
| 0.25 | 0.75 | 0.75 |
| 0.25 | 1.0 | 1.0 |
| 0.5 | 0.0 | 0.0 |
| 0.5 | 0.25 | 0.25 |
| 0.5 | 0.5 | 0.5 |
| 0.5 | 0.75 | 0.75 |
| 0.5 | 1.0 | 1.0 |
| 0.75 | 0.0 | 0.0 |
| 0.75 | 0.25 | 0.25 |
| 0.75 | 0.5 | 0.5 |
| 0.75 | 0.75 | 0.75 |
| 0.75 | 1.0 | 1.0 |
| 1.0 | 0.0 | 0.0 |
| 1.0 | 0.25 | 0.25 |
| 1.0 | 0.5 | 0.5 |
| 1.0 | 0.75 | 0.75 |
| 1.0 | 1.0 | 1.0 |

*rgb** -> *cmy0**

| | | rgb* -> cmy0* | | |
|------|-------|---------------|-------|------|
| | | 0.0 | 0.25 | 0.5 |
| 0.0 | 0.063 | 0.125 | 0.188 | 0.25 |
| 0.0 | 0.188 | 0.375 | 0.563 | 0.75 |
| 0.25 | 0.188 | 0.375 | 0.563 | 0.75 |
| 0.25 | 0.0 | 0.625 | 0.0 | 0.75 |
| 0.25 | 0.313 | 0.375 | 0.438 | 0.75 |
| 0.0 | 0.438 | 0.0 | 0.813 | 0.0 |
| 0.5 | 0.438 | 0.375 | 0.563 | 0.25 |
| 0.5 | 0.0 | 0.625 | 0.0 | 0.75 |
| 0.5 | 0.563 | 0.625 | 0.438 | 0.75 |
| 0.0 | 0.688 | 0.0 | 0.813 | 0.0 |
| 0.75 | 0.688 | 0.625 | 0.813 | |
| 0.75 | 0.0 | 0.875 | 0.0 | |
| 0.75 | 0.813 | 0.875 | | |
| 0.0 | 0.938 | 0.0 | | |
| 1.0 | 0.938 | | | |
| 1.0 | 0.0 | | | |
| 1.0 | | | | |
| 0.0 | | | | |

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$c_i^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

$rgb \rightarrow cmy0^*_e$

| | | | | | | | | |
|------|------|------|------|-----|------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.25 | 0.25 | 0.0 | 0.0 | 0.0 | 0.25 | 0.188 | 0.125 | 0.188 |
| 0.25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.25 | 0.0 | 0.125 | 0.125 |
| 0.25 | 0.25 | 0.5 | 0.0 | 0.0 | 0.25 | 0.313 | 0.375 | 0.188 |
| 0.0 | 0.25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.313 | 0.0 | 0.188 |
| 0.5 | 0.5 | 0.25 | 0.75 | 0.0 | 0.5 | 0.438 | 0.375 | 0.563 |
| 0.5 | 0.0 | 0.25 | 0.0 | 0.0 | 0.5 | 0.0 | 0.375 | 0.0 |
| 0.5 | 0.5 | 0.75 | 0.25 | 1.0 | 0.5 | 0.563 | 0.625 | 0.438 |
| 0.0 | 0.5 | 0.0 | 0.25 | 0.0 | 0.0 | 0.563 | 0.0 | 0.438 |
| 0.75 | 0.75 | 0.5 | 1.0 | 0.0 | 0.75 | 0.688 | 0.625 | 0.813 |
| 0.75 | 0.0 | 0.5 | 0.0 | 0.0 | 0.75 | 0.0 | 0.625 | 0.0 |
| 0.75 | 0.75 | 1.0 | 0.0 | 0.0 | 0.75 | 0.813 | 0.875 | 0.0 |
| 0.0 | 0.75 | 0.0 | 0.0 | 0.0 | 0.0 | 0.813 | 0.0 | 0.0 |
| 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.938 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

$rgb^* \rightarrow cmy0^*_{e5}$

| | | | | | | | | |
|------|------|------|-------|-------|------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 | 0.063 | 0.0 | 0.0 |
| 0.25 | 0.25 | 0.0 | 0.188 | 0.125 | 0.0 | 0.188 | 0.125 | 0.188 |
| 0.25 | 0.0 | 0.0 | 0.0 | 0.125 | 0.0 | 0.0 | 0.125 | 0.125 |
| 0.25 | 0.25 | 0.5 | 0.313 | 0.375 | 0.25 | 0.313 | 0.375 | 0.188 |
| 0.0 | 0.25 | 0.0 | 0.313 | 0.0 | 0.0 | 0.313 | 0.0 | 0.188 |
| 0.5 | 0.5 | 0.25 | 0.438 | 0.375 | 0.5 | 0.438 | 0.375 | 0.25 |
| 0.5 | 0.0 | 0.25 | 0.0 | 0.375 | 0.5 | 0.0 | 0.375 | 0.25 |
| 0.5 | 0.5 | 0.75 | 0.563 | 0.625 | 0.5 | 0.563 | 0.625 | 0.75 |
| 0.0 | 0.5 | 0.0 | 0.563 | 0.0 | 0.0 | 0.563 | 0.0 | 0.438 |
| 0.75 | 0.75 | 0.5 | 0.688 | 0.625 | 0.75 | 0.688 | 0.625 | 0.813 |
| 0.75 | 0.0 | 0.5 | 0.0 | 0.625 | 0.75 | 0.0 | 0.625 | 0.0 |
| 0.75 | 0.75 | 1.0 | 0.813 | 0.875 | 0.75 | 0.813 | 0.875 | 0.0 |
| 0.0 | 0.75 | 0.0 | 0.813 | 0.0 | 0.0 | 0.813 | 0.0 | 0.0 |
| 1.0 | 1.0 | 0.0 | 0.938 | 0.0 | 1.0 | 0.938 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Colorimetric transformation $i = 5$

$c_i^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

| $rgb \rightarrow cmy0^*$ | | | | |
|--------------------------|------|------|------|------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.5 | 0.75 | 1.0 |
| 0.25 | 0.25 | 0.0 | 0.0 | 0.0 |
| 0.25 | 0.0 | 0.5 | 0.5 | 0.75 |
| 0.25 | 0.5 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.25 | 0.0 | 0.0 |
| 0.5 | 0.5 | 0.75 | 0.75 | 1.0 |
| 0.5 | 0.0 | 0.25 | 0.0 | 0.0 |
| 0.5 | 0.75 | 0.75 | 1.0 | 1.0 |
| 0.0 | 0.5 | 0.0 | 0.25 | 0.0 |
| 0.75 | 0.75 | 1.0 | 1.0 | 1.0 |
| 0.75 | 0.0 | 0.5 | 0.0 | 0.0 |
| 0.75 | 1.0 | 1.0 | 1.0 | 1.0 |
| 0.0 | 0.75 | 0.0 | 0.0 | 0.0 |
| 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| $rgb^* \rightarrow cmy0^*_{e5}$ | | | | |
|---------------------------------|-------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.188 | 0.375 | 0.563 | 0.75 |
| 0.25 | 0.188 | 0.0 | 0.125 | 0.25 |
| 0.25 | 0.25 | 0.438 | 0.375 | 0.0 |
| 0.0 | 0.313 | 0.0 | 0.188 | 0.0 |
| 0.5 | 0.438 | 0.625 | 0.563 | 0.75 |
| 0.5 | 0.5 | 0.0 | 0.375 | 0.0 |
| 0.5 | 0.5 | 0.688 | 0.625 | 0.813 |
| 0.0 | 0.563 | 0.0 | 0.438 | 0.0 |
| 0.75 | 0.688 | 0.875 | 0.813 | 0.813 |
| 0.75 | 0.75 | 0.0 | 0.625 | 0.0 |
| 0.75 | 0.75 | 0.938 | 0.875 | 0.875 |
| 0.0 | 0.813 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.938 | 1.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 0.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Colorimetric transformation $i = 5$

$c_i^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

| $rgb \rightarrow cmy0^*$ | | | | |
|--------------------------|------|------|------|------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.5 | 0.75 | 1.0 |
| 0.25 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.25 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.25 | 0.5 | 0.0 | 0.75 | 0.0 |
| 0.0 | 0.25 | 0.0 | 0.0 | 0.25 |
| 0.5 | 0.25 | 0.75 | 0.0 | 1.0 |
| 0.5 | 0.0 | 0.25 | 0.0 | 0.0 |
| 0.5 | 0.75 | 0.25 | 1.0 | 0.0 |
| 0.0 | 0.5 | 0.0 | 0.25 | 0.0 |
| 0.75 | 0.5 | 1.0 | 0.25 | 0.75 |
| 0.75 | 0.0 | 0.5 | 0.0 | 0.75 |
| 0.75 | 1.0 | 0.5 | 0.0 | 0.75 |
| 0.0 | 0.75 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.75 | 0.0 | 0.0 | 1.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| $rgb^* \rightarrow cmy0^*_{e5}$ | | | | |
|---------------------------------|-------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.188 | 0.063 | 0.375 | 0.563 |
| 0.25 | 0.063 | 0.0 | 0.125 | 0.188 |
| 0.25 | 0.25 | 0.438 | 0.125 | 0.0 |
| 0.0 | 0.313 | 0.313 | 0.625 | 0.188 |
| 0.5 | 0.313 | 0.0 | 0.375 | 0.0 |
| 0.5 | 0.5 | 0.688 | 0.375 | 0.813 |
| 0.0 | 0.563 | 0.563 | 0.0 | 0.438 |
| 0.75 | 0.563 | 0.0 | 0.875 | 0.438 |
| 0.75 | 0.75 | 0.0 | 0.625 | 0.0 |
| 0.75 | 0.75 | 0.938 | 0.625 | 0.0 |
| 0.0 | 0.813 | 0.813 | 0.0 | 0.0 |
| 1.0 | 0.813 | 0.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 0.0 | 1.0 | 1.0 |
| 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |

Colorimetric transformation $i = 5$

$c_i^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

| $rgb \rightarrow cmy0^*_e$ | | | |
|----------------------------|------|------|------|
| 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.25 | 0.25 |
| 0.0 | 0.25 | 0.0 | 0.25 |
| 0.25 | 0.0 | 0.5 | 0.0 |
| 0.25 | 0.0 | 0.5 | 0.0 |
| 0.25 | 0.5 | 0.0 | 0.75 |
| 0.0 | 0.5 | 0.0 | 0.75 |
| 0.5 | 0.25 | 0.75 | 0.0 |
| 0.5 | 0.0 | 0.75 | 0.0 |
| 0.5 | 0.75 | 0.25 | 1.0 |
| 0.0 | 0.75 | 0.0 | 1.0 |
| 0.75 | 0.5 | 1.0 | 0.25 |
| 0.75 | 0.0 | 1.0 | 0.0 |
| 0.75 | 1.0 | 0.5 | 0.0 |
| 0.0 | 1.0 | 0.0 | 0.0 |
| 1.0 | 0.75 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 |

| $rgb^* \rightarrow cmy0^*_{e5}$ | | | |
|---------------------------------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.188 | 0.188 | 0.188 |
| 0.0 | 0.188 | 0.188 | 0.188 |
| 0.25 | 0.063 | 0.375 | 0.375 |
| 0.25 | 0.0 | 0.375 | 0.375 |
| 0.25 | 0.438 | 0.125 | 0.563 |
| 0.0 | 0.438 | 0.0 | 0.563 |
| 0.5 | 0.313 | 0.625 | 0.188 |
| 0.5 | 0.0 | 0.625 | 0.0 |
| 0.5 | 0.688 | 0.375 | 0.813 |
| 0.0 | 0.688 | 0.0 | 0.813 |
| 0.75 | 0.563 | 0.875 | 0.438 |
| 0.75 | 0.0 | 0.875 | 0.0 |
| 0.75 | 0.938 | 0.625 | 0.25 |
| 0.0 | 0.938 | 0.0 | 0.25 |
| 1.0 | 0.813 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 |

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$c_i^* = c_5^* = a \cdot c^{*b}$ with $a = 0,50$; $b = 1,00$

$rgb \rightarrow cmy0^*_e$

| | | | | |
|------|------|------|------|------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.25 | 0.25 | 0.25 | 0.25 |
| 0.25 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.25 | 0.0 | 0.5 | 0.0 | 0.25 |
| 0.25 | 0.25 | 0.0 | 0.0 | 0.25 |
| 0.0 | 0.5 | 0.0 | 0.75 | 0.0 |
| 0.5 | 0.25 | 0.25 | 0.0 | 0.0 |
| 0.5 | 0.0 | 0.75 | 0.0 | 1.0 |
| 0.5 | 0.5 | 0.25 | 0.25 | 0.0 |
| 0.0 | 0.75 | 0.0 | 1.0 | 0.0 |
| 0.75 | 0.5 | 0.5 | 0.25 | 0.0 |
| 0.75 | 0.0 | 1.0 | 0.0 | 0.75 |
| 0.75 | 0.75 | 0.5 | 0.0 | 0.0 |
| 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.75 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

$rgb^* \rightarrow cmy0^*_{e5}$

| | | | | |
|------|-------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.063 | 0.125 |
| 0.0 | 0.0 | 0.0 | 0.188 | 0.375 |
| 0.25 | 0.063 | 0.063 | 0.0 | 0.188 |
| 0.25 | 0.0 | 0.0 | 0.375 | 0.563 |
| 0.25 | 0.313 | 0.125 | 0.125 | 0.25 |
| 0.0 | 0.438 | 0.0 | 0.0 | 0.438 |
| 0.5 | 0.313 | 0.375 | 0.188 | 0.25 |
| 0.5 | 0.0 | 0.625 | 0.0 | 0.75 |
| 0.5 | 0.563 | 0.375 | 0.438 | 0.25 |
| 0.0 | 0.688 | 0.0 | 0.813 | 0.0 |
| 0.75 | 0.563 | 0.625 | 0.438 | 0.0 |
| 0.75 | 0.0 | 0.875 | 0.0 | 0.0 |
| 0.75 | 0.813 | 0.625 | 0.0 | 0.0 |
| 0.0 | 0.938 | 0.0 | 0.0 | 0.0 |
| 1.0 | 0.813 | 0.0 | 0.0 | 0.0 |
| 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |