

Total Area Coverage (TAC) Ink Limits Cheat Sheet

Created by Mahad Ikram | Prepress & Packaging Engineer

What is TAC? Total Area Coverage (or Total Ink Coverage) is the mathematical sum of the Cyan, Magenta, Yellow, and Black (CMYK) inks layered on a single point of a printed page. Exceeding paper limits causes wet ink to smear, offset, and ruin the press run.

Maximum Safe Ink Limits by Substrate:

- **Newsprint / Thin Kraft:** 220% – 240% Max
- **Uncoated Offset (Standard Letterhead/Cardboard):** 260% – 280% Max
- **Coated Sheetfed (Gloss/Silk Packaging):** 300% – 320% Max
- **High-End Art Paper:** 320% – 340% Max

(Never use 400% TAC. No paper can absorb 100C + 100M + 100Y + 100K).

The "Safe" Rich Black Formula (For Coated Paper) To achieve a deep, cool-toned black that dries safely without causing set-off, use this exact CMYK build:

- **Cyan:** 60%
- **Magenta:** 40%
- **Yellow:** 40%
- **Black:** 100%
- **Total TAC:** 240%

Prepress Verification Checklist:

- Did you check the darkest shadows of your photography using the Photoshop Info Panel (set to Total Ink)?
- Did you verify vector graphics in Adobe Acrobat using Tools > Print Production > Output Preview?
- Did you convert your final artwork to the specific ICC Color Profile provided by your commercial printer?

Visit mahadikram.com for the free TAC Density Calculator and more print production guides.