

# U20 HEAVYWEIGHT CARBONLESS PAPER

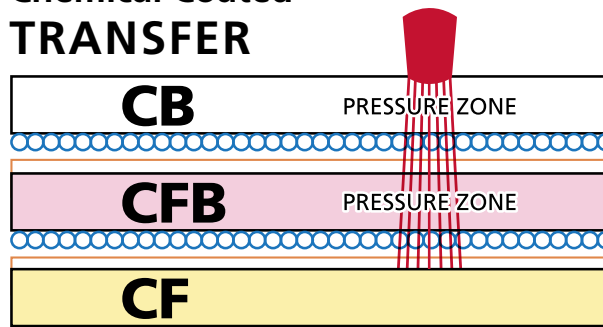


## SHEET STOCK COATED TRANSFER

### Product Description

U20 Heavyweight Carbonless Paper is a coated, transfer carbonless paper for use in business forms and other applications where a pressure-responsive, mated paper is required.

### Chemical Coated TRANSFER



CB: Coated Back » CFB: Coated Front and Back » CF: Coated Front

U20 Heavyweight Carbonless Papers have an improved, fast-developing image that shows up sharp and clear even to the fourth and fifth sheet as well as improved press runnability provided by a consistent, heavyweight sheet designed to reduce handling damage.

U20 Heavyweight CB and CFB papers are coated on the back with micro-sized capsules that contain image-forming dyes. U20 Heavyweight CF and CFB papers have a mating chemistry coating on the front.

When pressure is applied to a mated set, the microcapsules break and the image-forming dyes are transferred to the mating chemistry on the front of the CF or CFB sheet. The chemicals react to form a black image.

### Physical Properties

Average Values

PROPERTY	TEST METHOD	CB	CFB	CF	CF TAG
Basis Weight	T-410	20.6# Bond	21.5# Bond	20.9# Bond	105# Tag
Caliper	T-411	4.3 mils	4.4 mils	4.1 mils	8.0 mils
Brightness	T-452	92			
Opacity	T-425	88.2%			
Image Color	NCP Test	Black			
Odor	NCP Test	Virtually Odorless			

Test methods with a "T" prefix are established by the Technical Association of the Pulp and Paper Industry.

U20 Heavyweight Carbonless Paper is also available in other weights and grades not shown on this page.

### Technical Properties

**SHELF LIFE AND STORAGE:** The normal ranges of temperature and humidity have very little effect on the performance of U20 Heavyweight Carbonless Paper. The shelf life of product stored under normal storage conditions is at least two years. Stock should be kept current by practicing a first in/first out inventory rotation. Imaged sheets should be stored in normal office conditions to avoid the reduction of the permanency of the image. Image reduction can be caused by excessive exposure to various hand lotions and ultra-violet light sources. Should there be any questions concerning the performance of U20 Heavyweight Carbonless Paper in any specific applications, it is recommended that tests be conducted under "in-use" conditions to assure product suitability.

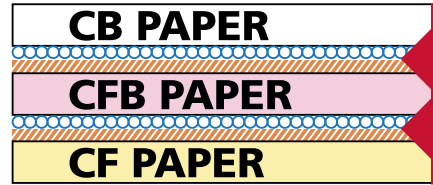
**SPEED OF IMAGE FORMATION:** The U20 Heavyweight Carbonless Paper image is immediately legible. The image will continue to darken over a short period of time. This darkening will be most apparent in handwritten forms. Extremely cold temperatures will slow down the speed of the image formations and high temperatures will increase the reaction rate.

**PRESSURE REQUIRED TO IMAGE:** U20 Heavyweight Carbonless Paper has the ability to produce quality copies in most impact imaging equipment. Because of the differences in individual requirements, the wide range of pressure exerted by various printers, or writing pressures associated

## Technical Properties

by hand entry, tests should be conducted to simulate the actual usage conditions for assuring satisfactory performance in specific applications.

### 3-PART SET



○○○○ MICROCAPSULES

////// MATING CHEMISTRY

NOTE: This form set must have a CB sheet as the top ply and a CF sheet as the bottom ply with all the intermediate sheets being CFB sheets.

### MICROFILMING AND COPYING:

Paper images reproduce very well on microfilm, digital scanners, and on most copying equipment.

**FAN-OUT PADDING:** U20 Heavyweight Carbonless Paper sheets are designed for use with NCP Fan-out Padding Adhesive to provide individual form sets. A CB sheet in the top position and a CF sheet (not CF-C2S ledger) in the bottom position are required for proper fan-out. The coated surfaces within each set of a carbonless paper form absorb the adhesive and stick together. U20 Heavyweight Carbonless Papers are designed to repel the adhesive on the front of the CB and the back of the CF sheets, allowing the production of form sets when the stock is fanned at the corners.

## Printing Characteristics

**PRESS AND INK:** U20 Heavyweight Carbonless paper may be printed on offset and letterpress equipment. Standard low-tack printing inks have given good performance.

**CAPSULE DAMAGE:** The CB and CFB papers are pressure responsive. Care should be taken to minimize capsule damage. Use minimum printing pressure. Minimize other pressure points such as in-feed rollers, marble guides, and ejector wheels to ensure minimal capsule breakage.

**BACKPRINTING:** U20 Heavyweight Carbonless Papers can be backprinted with good legibility using light ink coverage or lightly pigmented inks. The copy may also be screened with a 30-50% screen to minimize show-through. Capsule damage must be taken into consideration when backprinting CB or CFB with a direct rubber or letterpress plate. Capsule damage may cause a discoloration of the front of the CFB and the loss of image potential.

**CRASH PRINTING:** The mated U20 Heavyweight Paper form may be crash printed using metal type. By using this method, numbering, imprinting, or the complete format may be printed with a single impression.

**BLOCKOUT PRINTING:** The U20 Heavyweight Paper CF surface may be overprinted with a solid or scrambled letter pattern to obscure the carbonless image. Effective results are achieved with standard black ink.

**TINTING:** U20 Heavyweight Carbonless Paper can be tinted with common alcohol tinting solutions or printed with a 10-15% halftone screen. Avoid heavy ink coverage, which may mask the carbonless image. Transparent or process color inks give the best results.

**CONDITIONING AND HANDLING:** As with most paper grades, U20 Heavyweight Carbonless Paper should be acclimated to pressroom conditions before printing. Keep paper stored in original protective packaging until needed. Unused paper should be resealed in the original wrapper and stored in a controlled environment. Handle paper with minimum pressure to avoid inadvertently marking or scuffing the paper.

**IMAGE TEST:** Make a small firm mark on the first completed form set. Check each ply for the presence of the carbonless image. This will indicate whether or not the printing is being done on the proper side of the paper.

## Additional Information



For more information or assistance, contact:

Nekoosa Coated Products  
841 Market Street  
Nekoosa, WI 54457  
Phone (800) 826-4886

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