**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**

<table>
<thead>
<tr>
<th>Chemical Coated</th>
<th>PRESSURE ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB</td>
<td></td>
</tr>
<tr>
<td>CFB</td>
<td></td>
</tr>
<tr>
<td>CF</td>
<td></td>
</tr>
</tbody>
</table>

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

**Physical Properties**

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

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

<table>
<thead>
<tr>
<th>CB PAPER</th>
<th>CFB PAPER</th>
<th>CF PAPER</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://via.placeholder.com/150" alt="Microcapsules" /></td>
<td><img src="https://via.placeholder.com/150" alt="Mating Chemistry" /></td>
<td></td>
</tr>
</tbody>
</table>

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

### 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.

**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-CZ5 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.

**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

Limited Warranty: Limitation of Remedies; Limitation of Liability: NCP warrants only that this product will meet the above specifications. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING OR PERFORMANCE OR ANY CUSTOM OR USAGE OF TRADE, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT. This warranty is null and void in the event that anyone other than NCP alters, misuses or modifies the product. If this product is found to not meet the above warranty, purchaser’s exclusive remedy is that NCP or the product reseller will, at NCP’s or the product reseller’s option, either (a) repair the product; (b) replace the product; or (c) refund the purchase price of the product; within a reasonable time after written notification but no later than sixty (60) days after discovery of the warranty violation, all as specifically stated in NCP’s published warranty.

NCP WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, REVENUE, OR BUSINESS) IN ANY WAY RELATED TO THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ASSERTED.

Revised December 2010