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**novacote**  
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## TECHNICAL DATA SHEET

### Novacote NC-7105 + CA-7964 LAMINATING ADHESIVE

<b>PRODUCT DESCRIPTION</b>	:	Novacote NC-7105+ CA-7964 is a solvent-based two-component polyurethane adhesive for dry bond laminating of film/film, film/metallized films and film/foil structures. Novacote NC-7105 + CA-7964 shows high heat and product resistance properties in laminates. It's also suitable for retort pouch application up to retort temperature of 135°C.																																											
<b>PRODUCT REFERENCE</b>	:	<b>NC-7105</b> <b>(-OH component)</b>	<b>CA-7964</b> <b>Co-reactant (-NCO component)</b>																																										
<b>SOLID CONTENT</b>	:	(75 ± 2) %	(50 ± 1) %																																										
<b>VISCOSITY</b>	:	8000-12000 mPas at 25 °C	11-15sec DIN 4 cup																																										
<b>DILUENT</b>	:	Ethyl Acetate (urethane grade only).																																											
<b>MIX RATIO (BY WEIGHT)</b>	:	<table border="1"><thead><tr><th></th><th colspan="4"><u>Running solids</u></th></tr><tr><th></th><th><u>25%</u></th><th><u>30%</u></th><th><u>35%</u></th><th><u>40%</u></th></tr></thead><tbody><tr><td>NC-7105 :</td><td>100</td><td>100</td><td>100</td><td>100</td></tr><tr><td>Ethyl acetate :</td><td>225</td><td>167</td><td>125</td><td>94</td></tr><tr><td>CA-7964 :</td><td>25</td><td>25</td><td>25</td><td>25</td></tr><tr><td>Total (kg)</td><td>350</td><td>292</td><td>250</td><td>219</td></tr><tr><td>Viscosity at 25°C</td><td>12</td><td>13</td><td>15</td><td>17</td></tr><tr><td>DIN 4 Cup (sec)</td><td></td><td></td><td></td><td></td></tr></tbody></table>					<u>Running solids</u>					<u>25%</u>	<u>30%</u>	<u>35%</u>	<u>40%</u>	NC-7105 :	100	100	100	100	Ethyl acetate :	225	167	125	94	CA-7964 :	25	25	25	25	Total (kg)	350	292	250	219	Viscosity at 25°C	12	13	15	17	DIN 4 Cup (sec)				
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<b>DILUTION INSTRUCTIONS</b>	:	Mix NC-7105 + Ethyl Acetate first followed by co-reactant, CA-7964.																																											
<b>DYNAMIC PAN-LIFE</b>	:	24 hours (tested 35% running solids in ethyl acetate at 35 °C/100% rh)																																											
<b>APPLICATION METHOD</b>	:	Gravure coating or smooth roll coating.																																											
<b>DRYING CONDITIONS</b>	:	Forced hot air (60-90 °C) sufficient to remove the solvent. Exhaust must be efficient to remove solvent vapours from the drying tunnel.																																											
<b>NIP TEMPERATURE</b>	:	50-70 °C																																											
<b>DRY COATING WEIGHT</b>	:	2-4.5 gsm																																											

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**Novacote NC-7105 + CA-7964  
LAMINATING ADHESIVE**

<b>CURING TIME</b>	:	Bond immediately off the machine is good. Maximum heat and product resistance will develop within 5-10 days. Higher curing temperatures (e.g., 40 °C for 3-5 days) will accelerate curing rate, and give better heat and product resistance properties.
<b>PRE-TREATMENT OF FILMS</b>	:	For polyolefin films, corona treatment is mandatory. Pretreatment will improve the results obtained with polyester film and some nylon films. Recommended corona treatment level on common films is as follows: PE, PP films: 38 dynes/cm; PET, O-Ny: 52 dynes/cm; metallized films: 38-40 dynes/cm.
<b>STORAGE AND SHELF-LIFE</b>	:	NC-7105 and CA-7964 are flammable liquids. Store under dry conditions at 5 - 30°C, and away from direct sunlight. Close the containers after each use especially co-reactant, which is highly moisture-sensitive. Use up the products as soon as possible once the containers are open. Otherwise, purging of the containers with dry air or nitrogen gas is recommended. Shelf life is 6 months in original unopened containers stored away from heat, direct sunlight and rain.
<b>REGULATORY STATUS</b>	:	Novacote NC-7105 + CA-7964 complies with US FDA Regulation, 21 CFR § 175.105 (Adhesives for food packaging materials)
<b>IMPORTANT NOTE</b>	:	Before we introduce a new adhesive to the marketplace, the adhesive is comprehensively tested in our own laboratories. However, because of the hundreds of possible film combinations and the different printing ink systems used in various parts of the world, as well as the diversity of food, cosmetics, medical devices and pharmaceuticals that may be packaged in laminates made with our adhesive, we <u>cannot</u> possibly forecast their performance under all circumstances. Therefore, we strongly urge our customers to test our adhesive on a small scale to establish that laminates made with our adhesive are suitable for the end uses for which they are intended, prior to commencing large scale production.

Revised: 09/21