

1230 Claussen Drive Woodstock, IL 60098 Toll-Free: 800-325-0911 Phone: 815-334-0911 Fax: 815-334-0915 www.zeronine.com

#### **ZeroNine Features**

- High Quality
- 66+ Colors
- Outdoor Reliability
- Low Costs
- Customer Service
- Shipping Options
- Unconditional Guarantee



## ZeroNine Ribbon Data Sheet

ZeroNine ribbons are designed for print production on vinyl graphics capable of withstanding severe weather and handling conditions in both commercial and industrial applications.

Spot and Process Color Ribbons were formulated for and tested on 3M™ Scotchcal™ Vinyls. Other types of vinyls may be used but may not have the same performance level as shown in these test results.

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### **Chemical Exposure Test of NexGen Ribbons**

Testing Method: Print samples were laid flat, various chemicals were applied to the samples, and left to soak for 20 minutes. After exposure, all print samples were wiped vigorously by hand with a soft div paper towel.

Instruments Used to Measure the Effects: Spectrophotometer [HunterLab MiniScan® XE] to measure color variation in terms of lightness, red to green, and yellow to blue. Densitometer [MacBeth RD918] to measure the optical density or reflected image density of colors. Gloss Meter [Novo-Gloss] to measure the reflective properties (gloss) of the surface.

Chemical Agent	Test Results
✓#2 Diesel Fuel ✓Antifreeze ✓Methanol	Excellent - No Effect
✓10% Battery Acid (Sulfuric Acid)	Excellent - No Effect
✓Auto Wax (Meguiar's Quik Wax)	Excellent - No Effect
✓Citrus Based Cleaner (Fantastik® Orange Action™)	Excellent - No Effect
✓Glass Cleaner (Windex® Original (blue))	Excellent - No Effect
✓Penetrating Lubricant/Cleaner (WD-40®)	Excellent - No Effect
✓Brake Fluid (DOT 3)	Color Fade – Several Colors
✓IPA-Isopropyl Alcohol	Dulled Surface - Two Colors

Conclusion: Substantial improvements have been made in the NexGen ribbon line to resist harsh chemicals. Brake fluid exhibited the harshest effect of the agents.

**Update:** Development is underway to improve the affected colors above.

#### PRODUCT SPECIFICATION

Ink: Pigmented resin Carrier thickness: Polvester 5.7 micron Use: Indoor and outdoor vinyl application

#### PRINT HEAD SETTING

Most printheads are set to print a standard 6 micron ribbon, therefore we recommend a cooler printhead setting. Prevent problems in print performance by choosing the correct heat setting. A cooler printhead can also prolong the life of your printer. When overheated, all ribbons stretch causing misprints and diagonal stretch lines. This is most noticeable when printing solid areas of one color down one edge of vinyl. To learn how to reduce your printhead setting refer to our instruction sheet titled "Changing your Printhead Setting".

#### PRINTING ON STATIC CLING MATERIAL

Static cling vinyl reacts differently when being printed. Test the color ribbons to be used, or verify if the color is recommended for use on static cling prior to use. Some Legacy colors are not designed to print on static cling. All NexGen Colors are designed to work on static cling.

#### APPLICATION METHOD

Print graphics should cure for twenty minutes before application of transfer tape to the printed surface. Medium tack transfer tape is recommended. Pre-masked graphics should be stored in cool, dry conditions and out of direct sunlight.

#### PROTECTION

Vehicle graphics should be protected from unknown chemicals in car washes and garage cleaning services. NexGen ribbons have superior chemical resistance compared to Legacy ribbons. NexGen ribbons are recommended for vehicle graphics. Chemicals such as alcohol, gasoline, and brake fluid may harm the Legacy print ribbon after prolonged exposure. Clear protectors such as FrogSkin will prolong the life of any printed graphic. Call Zeronine for product recommendations.

#### PRINT QUALITY EXPECTATIONS

Spot and Process Color Ribbons are only warranted when processes and materials are followed as outlined in this data sheet. When specifications are adhered to, expected performance life is 3-5 years depending on the life expectancy of the vinyl. A significant decrease in performance life may be experienced when the vinyl graphic is applied to a surface other than vertical. Continuous exposure to hot, desert type regions may decrease expected performance life. The life expectancy of the base vinyl on which the Zeronine Ribb on is printed will dictate the performance of the print image.

#### CLEAN UP

After application of vinyl graphics, it is recommended to clean up with a non-acidic soap and warm water using a soft cloth or sponge. Do not use alcohol or solvent based cleaners.

#### PRINTED GRAPHIC STORAGE

Printed graphics should not be stored print side to print side. Undue  $\,$ pressure will create a wetting effect and damage your graphic. Place a slip sheet between each printed graphic, kraft paper is recommended.

#### SHELF LIFE AND STORAGE

Ribbons may be stored by the user for a period of I year Ribbons must be stored in a clean area, free from excessive moisture and should be stored within 40-60% relative humidity, out of direct sunlight. Ambient temperatures should be below 38°C or 100°F. Keep ribbons in the protective tube when not in use. Keep cartridges in the cartridge box when not in use.