

60020504AD Special ADE IR Transmitting Black is formulated to adhere to glass. The ink is a two-part system – the addition of ADE678 Glass Catalyst is necessary.

The ink allows high transmission at wavelengths starting from 700 nanometers and longer. The ink exhibits good opacity with low visible light transmission. Transmission efficiency may be affected by the ink layer, resins, additives and other raw materials in the formula. Thorough testing is necessary before any production run.

**SUBSTRATES** Glass and other transparent materials

## USER INFORMATION

*While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. See full disclaimer at the end of the document.*

Based on information from our raw material suppliers, these products are formulated to contain less than 0.06% lead. If exact heavy metal content is required, independent lab analysis is recommended.

**MESH** 200-305 threads per inch (78-120 threads per centimeter) monofilament polyester mesh or stainless steel mesh for most applications

**STENCIL** Solvent resistant direct emulsions and capillary films

**SQUEEGEE** 70-80 durometer polyurethane squeegee

**COVERAGE** 1200-1800 square feet (111–167 square meters) per gallon depending upon ink deposit

**PRINTING** Add 1 part ADE678 Glass Catalyst to 5 parts ink by weight. Allow the catalyzed ink mixture to stand for a period of about 30 to 45 minutes. This time lag, referred to as the “induction period,” is necessary to allow the catalyst to become uniformly mixed and available for the polymerization (cross linking) process. Pot life of the catalyzed ink is approximately 6 to 8 hours.

To maintain on-screen stability, add additional ink in small increments throughout the print run. Thoroughly mix the inks prior to printing.

Maintain ink temperature at 65°-90°F (18°-32°C) for optimum print drying performance. Lower temperatures increase the ink viscosity, impairing both flow and drying. Elevated temperatures lower the ink viscosity, reducing print definition, film thickness and opacity.

Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and drying variables/conditions.

**DRYING/  
CURING** Baking for at least 20 minutes at 140°F (60°C) is recommended. The ink will continue to cure for several days so final properties will not be achieved immediately. Increasing the time and/or temperature of the baking process will increase initial level of adhesion. The ink may also be dried at room temperature.

Good air circulation is necessary to remove the vaporized solvents. Multiple layers of ink may require longer drying times than a single layer.

Block resistance should be carefully tested prior to stacking printed pieces.

## ADDITIVES

All additives should be thoroughly mixed into the ink before each use.

Reducer: Use RE190 Thinner to reduce the viscosity of the ink for best printing results. Add up to 15% by weight.

Retarder: To prevent drying in the screen during hot humid conditions, add RE182 Retarder sparingly.

Catalyst: ADE678 Glass Catalyst, add 1 part catalyst to 5 parts ink by weight. Ink mixed with ADE678 has a 6 to 8 hour pot life.

Flow Control: CARE8 Flow Control Agent may be added from ½% to 1% by weight.

The recommended sequence for adding additives is: thinner and/or retarder first and the catalyst or adhesion promoter last. Mix thoroughly.

The addition of any additive may affect transmission properties; test thoroughly before production.

## CLEAN UP

Screen Wash (Prior to Reclaim): Use IMS201 Premium Graphic Screen Wash.

Press Wash (On Press): Use IMS301 Premium Graphic Press Wash.

## STORAGE

Store tightly covered at temperatures between 65°-90°F (18°-32°C). Ink taken from the press should not be returned to the original container; store separately to avoid contaminating unused ink.

## GENERAL INFORMATION

### INK HANDLING

All personnel mixing and handling these products must wear gloves and eye protection. Clean up spills immediately. If ink does come in contact with skin, wipe ink off with a clean, dry, absorbent cloth (do not use solvent or thinner). Wash the affected area with soap and water. Consult the Material Safety Data Sheet for further instructions and warnings.

### ADHESION TESTING

Cross hatch tape test – use a cross hatch tool or a sharp knife to cut through ink film only; then apply 3M #600 clear tape on cut area, rub down, wait for 1 minute and rip off at a 180 degree angle. Ink should only come off in actual cut areas.

### PACKAGING

60020504AD is available in kilogram and/or gallon containers.

### PACKAGING

Additives/Reducers are available in quart, liter and/or gallon containers. Cleaners are available in 1-gallon, 5-gallon and 55-gallon containers.

Stock Number	Additives/Reducers	Stock Number	Clean Up
ADE678	Glass Catalyst (liters only)	IMS201	Premium Graphic Screen Wash
RE182	Retarder (gallons only)	IMS301	Premium Graphic Press Wash
RE190	Thinner (gallons only)		
CARE8	Flow Control Agent		

*Nazdar® stands behind the quality of this product. Nazdar® cannot, however, guarantee the finished results because Nazdar® exercises no control over individual operating conditions and production procedures. While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. Users are also responsible for testing to determine that our product will perform as expected during the printed item's entire life-cycle from printing, post-print processing, and shipment to end-use. This product has been specially formulated for screen printing, and it has not been tested for application by any other method. Any liability associated with the use of this product is limited to the value of the product purchased from Nazdar®.*

Nazdar Worldwide Headquarters  
8501 Hedge Lane Terrace, Shawnee, KS 66227-3290 USA  
Toll Free: 866.340.3579 or Tel: 913.422.1888 Fax: 913.422.2296  
e-mail: [custserv@nazdar.com](mailto:custserv@nazdar.com)

Nazdar Limited  
Barton Road, Heaton Mersey, Stockport, England SK4 3EG  
Tel: + (44) 0.161.442.2111 Fax: + (44) 0.161.442.2001  
e-mail: [technicalservicesuk@nazdar.com](mailto:technicalservicesuk@nazdar.com)

<http://www.nazdar.com>