



ADE SERIES EPOXY SCREEN INK

TECHNICAL INFORMATION AND APPLICATION INSTRUCTIONS

SUBSTRATES Epoxy, melamine, treated polyethylene, treated polypropylene, metals, glass, PC boards

END USES Ideal for electronic and industrial applications.

PRODUCT INFORMATION

ADE Series Epoxy Screen Ink is formulated with high-quality epoxy resins for excellent adhesion to a wide range of hard-to-print substrates. ADE Series provides outstanding solvent, chemical and abrasion resistance. ADE Series must be mixed with catalyst prior to use.

ADE Series inks are for indoor applications only.

APPLICATION INFORMATION

MESH 200-305 monofilament polyester or stainless steel mesh.

STENCIL Direct method photo emulsion or equivalent; any solvent resistant film or photo emulsion.

SQUEEGEE 70-80 durometer polyurethane blades as well as multi-durometer blades that produce an even ink deposit.

COVERAGE 1,000 – 2,000 square feet per gallon depending on mesh used.

INK PREPARATION Add 1 part ADE677 Catalyst to 5 parts ink by weight. Allow the catalyzed ink mixture to stand for a period of about thirty to forty five 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 process. Shelf life of the catalyzed ADE ink is approximately 6-8 hours.

RE190 Thinner or RE182 Retarder may be added to the catalyzed ink from 5%-15% by weight.

Mix inks thoroughly.

ADE678 Glass Catalyst and ADE679 Snowboard Catalyst – contact Technical Services for special data sheet.

PRINTING For best printing results, reduce ink with 5%-15% by weight RE190 Thinner. To prevent drying in screen under hot, humid conditions, add RE182 sparingly.

Treated polyethylene and treated polypropylene must have a minimum surface energy level of 46 dynes/cm for optimum ink flow and adhesion.

DRYING/ CURING	Air-dry approximately 30-60 minutes at room temperature. Room temperature drying may take 5-7 or more days for complete cure. Force-dry for 3-5 minutes at 150°-180°F (66°-83°C). Twenty four hours is required to achieve full cure. Most ADE printed colors may be baked for 10 minutes at 300°-325°F (150°-164°C) with the exception of ADE10, ADE11, and ADE12. These three colors may be baked at 150°-250°F (66°-121°C) for 10 minutes. Baking ADE prints will produce the hardest, most durable finish.
CLEAR/ EXTENDERS/ ADDITIVES	To extend color and/or reduce pigmentation, add ADE26 Mixing/Metallic Clear. For printing halftones and fine details, add ADE90 Heavy Body Base.
ADHESION TESTING	Cross hatch tape test – use a cross hatch tool or sharp knife to cut through the ink film only. Apply 3M #600 clear tape on cut area, rub down and rip off. Ink should only come off from actual cut areas. Fingernail scratch test – thoroughly dried ink will resist scratching.
CLEAN UP	Use IMS 301 Premium Graphic Press Wash for cleaning ink off the screen and IMS 201 Premium Graphic Screen Wash prior to reclaiming.

GENERAL GUIDELINES

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 and rinse the affected area with soap and water. Consult the ADE Series Material Safety Data Sheet for further instructions and warnings.
MIXING COLORS	These colors are highly concentrated and are recommended for color matching. The higher pigment concentration of these colors provides stronger colors. This facilitates matching colors on non-white substrates as well as providing an adjustment range to change the color for varying levels of ink deposit.
PANTONE MATCHING SYSTEM® BASE COLORS	The Pantone Matching System ® Base colors are highly concentrated versions of the base colors used to simulate the Pantone ® color specifier 1000.
STANDARD PRINTING COLORS	The Standard Printing Colors have excellent opacity and flow characteristics.

**METALLIC
COLORS**

Metallic pigment may be added to the inks as a component of a color match or to ADE26 Mixing /Metallic Clear. Due to possible limited shelf life, only mix quantities of metallic ink needed for immediate use. Excessive amounts of metallic powder will degrade adhesion and the overall performance of the printed ink.

When inks are to be printed over a metallic color, the overprinting ink(s) must be evaluated for intercoat adhesion over metallic colors before proceeding with the production run. To maximize intercoat adhesion over metallic colors, we recommend that the metallic be printed as late as possible in the print sequence.

STORAGE

Store tightly covered at temperatures between 60°-90°F (15°-32°C). Ink taken from the press should not be returned to the original container; store separately to avoid contaminating unused ink.

+COLOR AVAILABILITY

Stock Number	Mixing Colors
ADE62	Warm Red
ADE67	Reflex Blue
ADE80	Process Yellow
ADE82	Carmin Red
ADE83	Magenta
ADE84	Maroon
ADE85	Green
ADE86	GS Blue
ADE87	RS Blue
ADE88	Violet
ADE89	Red Toner
ADE90	Heavy Body Base
ADE456	Process Blue
ADE586	Permanent Process Red

Stock Number	Standard Printing Colors
ADE10	Primrose Yellow
ADE11	Lemon Yellow
ADE12	Medium Yellow
ADE19	Fire Red
ADE20	Brilliant Orange
ADE22	Ultra Blue
ADE26	Mixing/Metallic Clear
ADE52	Opaque Black
ADE75	Opaque White
ADE78	High Intensity White

Stock Number	Pantone Matching System® Base Colors
ADE360	Orange
ADE361	Yellow
ADE362	Warm Red
ADE363	Rubine Red
ADE364	Rhodamine Red
ADE365	Purple
ADE366	Violet
ADE367	Reflex Blue
ADE368	Process Blue
ADE369	Green

Stock Number	Additives/Reducers
ADE677	Catalyst
ADE678	Glass Catalyst
ADE679	Snowboard Catalyst
RE182	Retarder
RE190	Thinner

Stock Number	Clean Up
IMS 201	Premium Graphic Screen Wash
IMS 301	Premium Graphic Press Wash

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.

+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.

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