



Scotchcal™ Graphic Film Series 20

for solvent based piezo ink jet printing

Description

Advantages

- Excellent image performance with solvent based piezo ink jet printers
- Excellent hiding power
- For MCS™ warranted promotional applications
- Films 20-114R and 20-124R are intended for use as printable basefilm and protective overlamine

Product Line

IJ	20-10R	
RG	20-10R	White gloss, removable adhesive
FN	20-10R	
IJ	20-20R	
RG	20-20R	White matte, removable adhesive
FN	20-20R	
IJ	20-114R	
RG	20-114R	Transparent gloss, removable adhesive
FN	20-114R	
IJ	20-124R	Transparent matte, removable adhesive

Note: The "RG" product is standard Series 20 Film, which is reversed wound on a 4-notched core for use with the Arizona™ Digital Screen Press

The "FN" product is standard Series 20 Film, which is standard wound on a 4-notched core for use with the Arizona™ 500/600 Digital Screen Press

Characteristics

This information is subject to change. These values are typical for unprinted film and are not intended for use in specifications. Be sure this is the most current Product Bulletin. See **3M Related Literature** at the end of this bulletin.

Characteristic	Description
Film	2,8 mil (70µm), white/ transparent vinyl (monomeric)
Thickness (film and adhesive)	83 93 µm
Adhesive type and	Pressure sensitive, light gray*

color	(*except IJ 20-114, -124R) Removable, water based acrylic
Liner	135 g/m ² , paper
Application surface	Flat
Application substrates	Metal, paint, rigid PVC, glass
Minimum application temperature (air and substrate)	10°C
Removal	Removable within the durability of the product
Service temperature range	-50°C to +90°C
Tensile strength (min)	130%
Applied shrinkage	< 0.5 mm
Adhesion (FINAT TM-1, stainless steel, 200 mm/min)	< 10 N/25 mm
Shelf life	2 years after receipt from 3M (dry conditions, Temp. < 38°C)

Effective Performance Life

When manufactured, applied and maintained in accordance with 3M recommended procedures, graphics produced on 3M™ Scotchcal™ Graphic Film Series 20 and protected with selected 3M™ Scotchcal™ Overlaminates a warranty founded on 3M™ MCS™ will be given by 3M. Performance statements are based upon representative experience obtained from testing throughout Europe. Actual performance will be determined by substrate selection and preparation, maintenance of the marking and exposure conditions.

When to Use an Overprint Clear or Overlamine

An overprint clear or overlamine provides protection to a graphic as well as changing gloss. Typically, only graphics that are subjected to harsh conditions require this protection in order to be warranted. They include:

- Vehicle and fleet graphics; such graphics are subjected to abrasion such as road debris and automatic/power washing.
- Any graphic exposed to abrasive washing conditions, including automatic/power washing, harsh cleaners or chemicals.

Warranted Durability

The 3M MCS™ Warranty statement for Scotchcal™ Graphics Film Series 20 is based on chosen media construction.

Please refer to the European MCS™ Product Warranty Chart for details. The Product Warranty Chart is available on request from your local 3M contacts.

Film 20-114R is not recommended for wet application method.

Limitations of End Uses

Films 20-114R and 20-124R are not recommended for wet application method.

Specifically, we do not warrant this film for the following:

- Graphics applied to:
 - Corrugated or highly irregular surfaces or sharply raised areas such as huck bolts.
 - Substrates that do not have a clean, smooth surface or have poor paint-to-substrate adhesion.
 - Stainless steel.
 - Flexible substrates.
 - Compound contours.
 - Exterior horizontal applications.
- Graphic removal from:
 - Existing graphics that must remain intact.
- Graphics subjected to gasoline vapours or spills.

Application Tapes

Overlamine or Overprint Clear	Prespace Tape	Premask Tape
Printed, uncleared	SCPS-100	SCPM-19
Printed, cleared or overlaminated	SCPS-100	SCPM-19

See Instruction Bulletin 4.3 for details.

Removal

Series 20 Graphics Films can be removed within the durability period.

We recommend to remove Series 20 films without heat.

Important Notice

This bulletin provides technical information only. All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

3M Related Literature

3M offers for all products detailed technical literature. Additionally, comprehensive instruction bulletins are available describing in detail the best usage of our products.

Ask your local 3M contacts or refer to local Commercial Graphics internet pages to get the most current product and/or instruction bulletins.

For Further Assistance

For help on specific questions relating to 3M Commercial Graphics products, please contact your local 3M Technical Service person or contact:

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