



Laminating Adhesives/Data Page

FOD # 0282

467 Laminating Adhesive 468 Laminating Adhesive

Product Construction

| | <u>Adhesive</u> | <u>Liner</u> |
|-----|---|--|
| 467 | 2.0 mils (51 microns) #200 “Hi-Performance” Acrylic Adhesive | 3.8 mils (97 microns) 62# Densified Kraft |
| 468 | 5.0 mils (127 microns) #200 “Hi-Performance” Acrylic Adhesive | 3.8 mils (97 microns) 62# Densified Kraft |

Features

- #200 “Hi Performance” acrylic adhesive offers excellent chemical and temperature resistance.
- Excellent bond to metal and high surface energy plastics (e.g. ABS, polycarbonate).
- Densified Kraft liner for minimum edge burr when processing metal nameplates.
- Densified Kraft liner for rotary die cutting of plastic nameplates.
- Low leachable chloride and low outgassing, useful for adhesive applications in the hard disk drive area.

Applications

- Metal nameplates for the appliance or electronic industries.
- Excellent general purpose bonding in the industrial market.
- Used for nameplates and decorative plates produced on roll to roll rotary die cutting process.

Physical Properties

(Typical values – not for specification use)

| | <u>Product</u> | 20 Minute Dwell | |
|--|----------------|------------------------|-----------------|
| | | <u>Oz./In.</u> | <u>N/100 mm</u> |
| ASTM D-3330 (modified) | 467 | 48 | 53 |
| (90 degree peel, 12"/min. 305 mm/min.) 2 mil aluminum to stainless steel | 468 | 66 | 72 |

| | <u>Product</u> | 72 Hr. Dwell | | Ultimate Bond | |
|---|----------------|--|----------------|----------------------|----------------|
| | | <u>Oz./In.</u> | <u>N/100mm</u> | <u>Oz./In.</u> | <u>N/100mm</u> |
| ASTM D-3330 (modified) | | | | | |
| (90 degree peel, 12"/min. 305 mm/min.) 2 mil aluminum to various surfaces | | | | | |
| - Metal (Stainless Steel) | 467 | 72 | 79 | 136 | 149 |
| | 468 | 106 | 116 | 158 | 173 |
| - High Surface Energy Plastic (Polycarbonate) | 467 | 50 | 55 | | |
| | 468 | 73 | 80 | | |
| - Low Surface Energy Plastic (Polypropylene) | 467 | Not suggested – consider #300, #300MP or #350 | | | |

Environmental Performance

The properties defined are based on the attachment of impervious faceplate materials (such as aluminum) to an aluminum test surface.

| | |
|---------------------------------|--|
| Bond Build-up: | The bond strength of “Scotch” brand #200 “Hi-Performance” Acrylic Adhesive increases as a function of time and temperature. |
| Humidity Resistance: | High humidity has a minimal effect on adhesive performance. Bond strengths are generally higher after exposure for 7 days at 90 degrees F (32 degrees C) and 90% relative humidity. |
| U.V. Resistance: | When properly applied, nameplates and decorative trim parts are not adversely affected by outdoor exposure. |
| Water Resistance: | Immersion in water has no appreciable effect on the bond strength. After 100 hours in room temperature water the bond actually shows an increase in strength. |
| Temperature Cycling Resistance: | Bond strength generally increases after cycling four times through: 4 hours at 158 degrees F (70 degrees C) 4 hours at -20 degrees F (-29 degrees C) 16 hours at room temperature |
| Chemical Resistance: | When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including gasoline, MEK, oil, Freon™ TF, sodium chloride solution, mild acids and alkalis. |
| Temperature Resistance: | The #200 “Hi-Performance” adhesive is usable for short periods (minutes, hours) at temperatures up to 350 degrees F (177 degrees C) and for intermittent longer periods of time (days, weeks) up to 250 degrees F (121 degrees C). |
| Low Service Temp: | -40 degrees F (-40 degrees C). |
| Shelf Life: | Product retains its performance and properties for two years from date of manufacture if properly stored at room temperature conditions of 72 degrees F (22 degrees C) and 50% R.H. Storage in plastic bag is recommended. |

Special Considerations/Application Tips

For maximum bond strength the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane or isopropyl alcohol. Consult manufacturer’s Material Safety Data Sheet for proper handling and storage instructions.

Bond strength can also be improved with firm application pressure and moderate heat, from 100 degrees F (38 degrees C) to 130 degrees F (54 degrees C), causing the adhesive to develop intimate contact with the bonding surface.

Ideal adhesive application temperature range is 70 degrees F to 100 degrees F (21 degrees C to 38 degrees C). Initial application to surfaces at temperatures below 50 degrees F (10 degrees C) is not recommended for most pressure sensitive adhesives because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is satisfactory. For more specific information contact our Customer Service and Sales Support “hot line” at 1-800-223-7427.

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