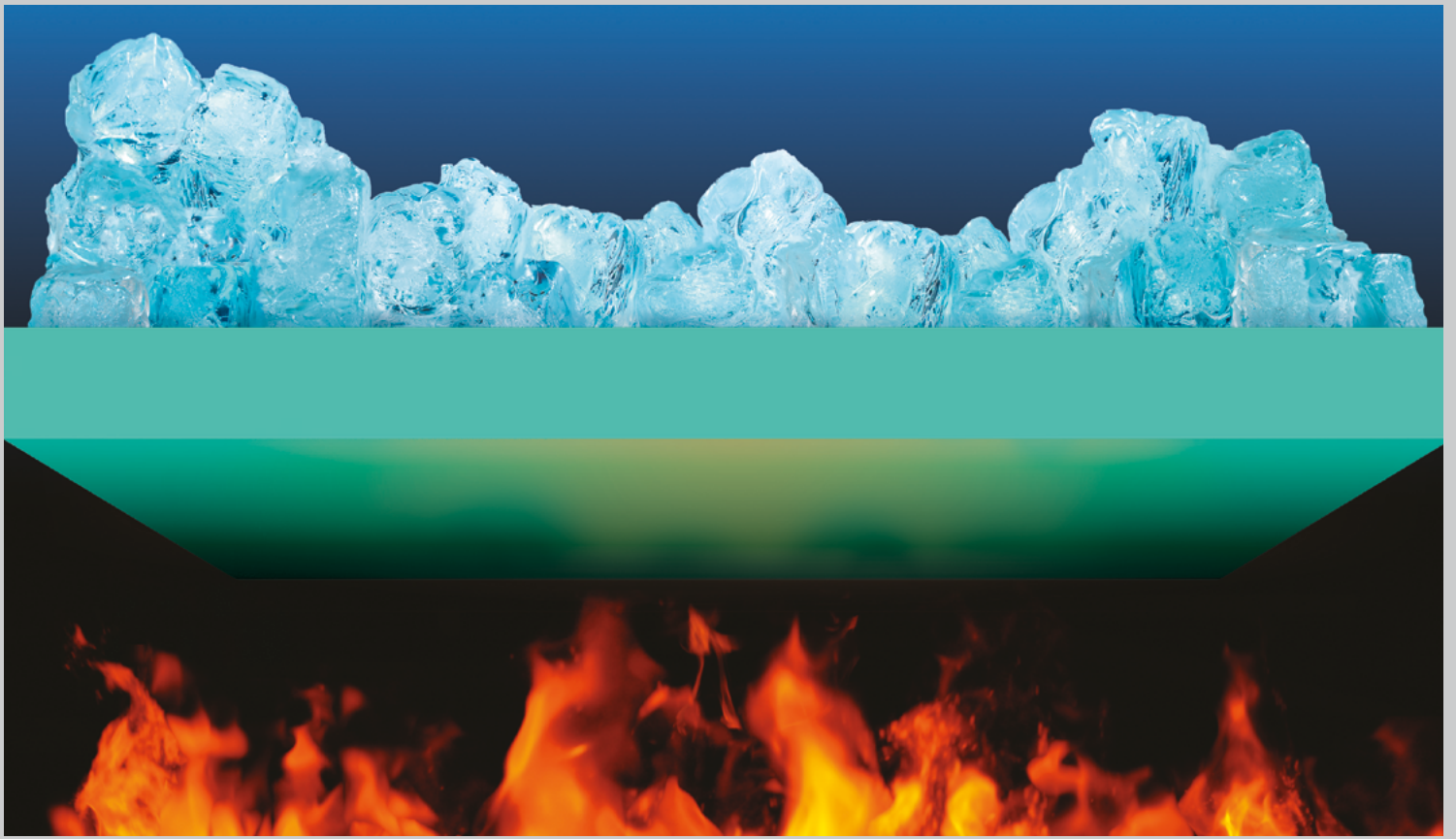




# LAB 975 New

## HEAT RESISTANT EPOXY TOOLING BOARD WITH HIGH DIMENSIONAL STABILITY

**LAB 975 New is the first choice for the construction of prepreg tools, master models and vacuum forming moulds for temperatures up to 130 °C.**

- Density 0.70 kg/ltr.
- High temperature resistance up to 130 °C
- Very low coefficient of thermal expansion  $\alpha_T$  35-40 x 10<sup>-6</sup>
- High compressive strength
- Easy workability
- Excellent surface quality

# LAB 975 New

## AREAS OF APPLICATION

- Manufacturing of heat resistant master models for the construction of prepreg tools for the autoclave up to 130 °C
- Manufacturing of master models, vacuum forming moulds and laminating moulds

## PRODUCT BENEFITS

- High dimensional stability
- Easy workability
- Very good surface after finishing
- Medium density
- High temperature resistance
- Good price-performance-ratio

## DESCRIPTION

- **Basis:** Epoxy, green
- **Adhesive:** H 8973/H 8973
- **Filler:** H 8973/H 8973 + Filler RZ55
- **Dimensions in mm:** 1500 x 500 x Thickness 50/75/100/150/200

## PHYSICAL DATAS (APPROX. VALUES)

|                                                    |            |                 |                       |
|----------------------------------------------------|------------|-----------------|-----------------------|
| Density                                            | ISO 2781   | kg/ltr.         | 0,70                  |
| Shore hardness, 23 °C                              | ISO 868    | -               | D 75                  |
| Flexural strength                                  | ISO 178    | MPa             | 30                    |
| E-Modulus                                          | ISO 178    | MPa             | 2,300                 |
| Compressive strength                               | ISO 604    | MPa             | 50                    |
| Heat distortion temperature                        | ISO 11359  | °C              | 130                   |
| Coefficient of thermal expansion (CTE), $\alpha_T$ | DIN 53 752 | K <sup>-1</sup> | 55 x 10 <sup>-6</sup> |

## MILLING PARAMETERS

| Milling steps                        | 1.                       | 2.                            | 3.                             | 4.                             | 5.                         | 6.                             | 7.                                   |
|--------------------------------------|--------------------------|-------------------------------|--------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------------|
| Strategy                             | Roughing<br>Z - constant | Rest material<br>Z - constant | Rest material<br>Z - constant  | Rest material<br>Z - constant  | Finishing<br>flat areas    | Finishing<br>Z - constant      | Finishing<br>rest material<br>shapes |
| Milling tool                         | Torus<br>cutter          | Torus<br>copying<br>cutter    | Ball nose<br>copying<br>cutter | Ball nose<br>copying<br>cutter | Torus<br>copying<br>cutter | Ball nose<br>copying<br>cutter | End mill<br>cutter                   |
| Diameter [mm]                        | 42                       | 20                            | 12                             | 6                              | 8                          | 8                              | 4                                    |
| Number of teeth                      | 3                        | 2                             | 2                              | 2                              | 2                          | 2                              | 2                                    |
| Radius [mm]                          | 3                        | 4                             | 6                              | 3                              | 1                          | 4                              | 2                                    |
| Cutting speed (Vc) [m/min]           | 540                      | 500                           | 600                            | 300                            | 400                        | 400                            | 200                                  |
| Revolutions [1/min]                  | 4,100                    | 7,957                         | 16,000                         | 16,000                         | 16,000                     | 16,000                         | 16,000                               |
| Feedrate per tooth [mm]              | 0.6                      | 0.5                           | 0.2                            | 0.18                           | 0.13                       | 0.13                           | 0.13                                 |
| Feed rate (Vf) [mm/min]              | 7,380                    | 7,957                         | 6,366                          | 5,760                          | 4,160                      | 4,160                          | 4,160                                |
| Cutting depth (ap) [mm]              | 3                        | 2                             | 1                              | 0.3                            | 0.3                        | 0.15                           | 0.1                                  |
| Cutting width/Line spacing (ae) [mm] | 30                       | 10                            | 2                              | 0.5                            | 4                          | 0.3                            | 0.1                                  |

Our most current General Sales Conditions shall apply.

Please consult the Product Data Sheet prior to any use and processing.

Actual Product Data Sheets and information about additional products please find in:

[www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)



### Sika Deutschland GmbH

#### Sika Advanced Resins

Stuttgarter Strasse 139

72574 Bad Urach

Germany

Telefon + 49 (0) 7125 940-492

Fax + 49 (0) 7125 940-401

E-Mail [tooling@de.sika.com](mailto:tooling@de.sika.com)

[www.sikaadvancedresins.de](http://www.sikaadvancedresins.de)

### Sika Automotive France SAS

#### Sika Advanced Resins

Z.I. des Béthunes - 15 rue de l'Équerre

CS 40444 Saint Ouen l'Aumône

95005 Cergy pontoise Cedex - France

Phone +33 (0) 134 40 34 60

Fax +33 (0) 134 21 97 87

E-Mail [advanced.resins@fr.sika.com](mailto:advanced.resins@fr.sika.com)

[www.sikaadvancedresins.fr](http://www.sikaadvancedresins.fr)

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