

## Thermoforming KYDEX® T Sheet on Flash Heating Systems

TB - 140-D

### Introduction

“Flash” heaters are a relatively new form of heating systems on single station vacuum forming machines. They have been developed to significantly decrease cycle times and increase productivity of single station thermoforming machines.

The wavelengths used by “Flash” heating machines allow deep penetration of the radiation and excellent heating of all materials – thick as well as thin.

KYDEX® sheet works well on “Flash” heating systems.

As on “conventional” heating systems, 60 - 70% of heat should be applied to the bottom surface and 40 – 30% to the top surface. This is as recommended for conventional heating systems in the Kleerdex “KYDEX® sheet thermoforming guide”.

The nature of Flash heating does require slightly different processing of heavily textured materials (this applies to all materials, not just KYDEX® sheet). Due to the nature of heavy textures there is more variation of sheet thickness. Given the speed of heating involved on “Flash” machines this can result in different levels of heating on one sheet if it is heavily textured.

1. Increase the heating on the non-textured surface up to 90% or even 100% (i.e. very little or no heating to the textured surface).
2. Allow 5 – 10 seconds time gap after heating prior to “pulling the part”. This allows heat to dissipate evenly over the surface.

With Flash heating systems, lighter colors take longer to heat than darker colors.

For more technical advice we would recommend contacting:

Manfred Geiss  
 Geiss Thermoforming  
 Industriestrasse 2  
 D 96145 Sesslach  
 Germany  
 Telephone: +49 9569 9221 51  
 Fax: +44 9569 9221 20  
[www.geiss-ttt.com](http://www.geiss-ttt.com)

**1-888-CURBELL**

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

Curbell Plastics is a proud supplier of SEKISUI SPI materials

### SEKISUI SPI

#### Customer Service

6685 Low St, Bloomsburg, PA 17815 USA  
 Phone: 800.325.3133, +1.570.389.5810  
 Outside the US: +1.570.389.5814  
 Fax: 800.452.0155, +1.570.387.7786  
 Email: [info@sekisui-spi.com](mailto:info@sekisui-spi.com)

#### Technical Service

Phone: 800.682.8758  
 Fax: +1.570.387.8722  
 Outside the US: +1.570.387.6997  
[techservice@sekisui-spi.com](mailto:techservice@sekisui-spi.com)

[sekisui-spi.com](http://sekisui-spi.com)

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability of the accuracy of this information or the suitability of our products in any given situation. Users should conduct their own tests to determine the suitability of each product for their particular purposes. Data in the physical property table represents typical values and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions. Right to change physical properties as a result of technical progress is reserved. THE PRODUCTS DISCUSSED ARE SOLD WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, EITHER EXPRESSED OR IMPLIED, EXCEPT AS PROVIDED IN OUR STANDARD TERMS AND CONDITIONS OF SALE. Buyer assumes all responsibility for loss or damage arising from the handling and use of our products, whether done in accordance with directions or not. In no event shall the supplier or the manufacturer be liable for incidental or consequential damages. Also, statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Consult local code and regulatory agencies for specific requirements regarding code compliance, transporting, processing, recycling and disposal of our product. Product not intended for use as a heat resistant surface. Texture, product grade and other conditions may cause variations in appearance.

This information supersedes all previously published data.