

## IsoFlex 100W351

IsoFlex 100W351 is a 10 pound moldable flexible foam.

### APPLICATIONS

- Cushions
- Foam
- Rapid Prototypes

### PRODUCT ADVANTAGES

- 100% Solids
- Pourable

\*Values given are not intended to be used in specific preparation

### Component Properties

Color - ISO	brown
Color - POL	black
Specific Gravity - 74°F, ISO	1.22
Specific Gravity - 74°F, POL	1 - 1.08
Viscosity - ASTM D-2196 - 74°F, ISO	260 - 460 cps
Viscosity - ASTM D-2196 - 74°F, POL	1200 - 1700 cps

### Reactivity Profile

Ratio by Weight - ISO:POL	42 - 100
Cream Time	24 - 34 Seconds
Gel Time	51 - 78 Seconds
Rise Time	105 - 165 Seconds
Tack Free Time	120 - 180 Seconds

### Typical Physical Properties

Free Rise Density - ASTM D1622	8 - 12 pcf
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### RECOMMENDED HANDLING INSTRUCTIONS

Always mix/roll POL side prior to use to ensure a homogenous product.

Measuring and Mixing - Liquid urethanes are moisture sensitive and will absorb atmospheric moisture. Mixing tools and containers should be clean and made of metal, glass or plastic. Materials should be stored and used in a warm environment (~72°F) to achieve optimal results.

Know the mix ratio and initiation time for the IsoFlex products you are using. This information is located in the Reaction Profile section of the Technical Data Sheet. Isotec®'s IsoFlex products can be mixed with a jiffy mixer. After dispensing the correct amounts of POL and ISO into the mixing container, mix thoroughly for 10-20 seconds. Stir quickly making sure that you scrape the sides and bottom of the mixing container several times; be careful not to splash low viscosity material out of the container. Remember, foams cure quickly. Do not delay between mixing and pouring.

Pouring & Curing - For best results, pour your mixture in a single spot at the lowest point of the mold containment field and let the mixture seek its level. Allow space in the containment field for the foam to grow as it expands to its ultimate volume. Allow foam to cure for at least 30 minutes before handling.

Improving Surface Finish & Minimizing Voids With Back Pressure - Use a board that will completely cover the mold opening. Using a 3/4" (2 cm) drill bit, drill 3 holes in the board spaced a few inches/cm apart. Make sure that, when the board is placed over the mold opening, the holes are over the mold cavity and rising foam will be able to make it through. Apply IsoKote S5 mold release thoroughly to both sides of the board and into the drilled holes. Mix and pour IsoFlex into mold cavity and place board over mold opening. Secure board firmly in place (mold straps may be necessary). As foam rises in the mold cavity, some foam will grow out of the drilled holes. After the foam stops growing, you can let go of the board. Do not handle for at least 30 minutes. You can then cut excess material that came through holes and gently remove board and casting.

Fully Cured Foam can be sanded, machined, drilled, etc. (wear NIOSH approved respirator). Foam can also be primed and/or painted.

## STORAGE

Storage temperature:

minimum: 24 °C (75.2 °F)

maximum: 30 °C (86 °F)

Protect Iso and Pol side from moisture. The reaction of isocyanates with water leads to the formation of insoluble ureas and carbon dioxide gas which can result in pressure build up inside closed containers. Therefore, extreme care must be taken to assure containers containing Iso remain dry. Reaction from atmospheric moisture can be prevented by storing the Iso in carefully sealed containers or under a dry nitrogen atmosphere. Moisture contamination of the Pol side will effect the density of the foam and cause a weaker product. During handling, the Iso and Pol must also be protected from atmospheric moisture and water contamination, and containers must be carefully resealed with dry nitrogen after each sampling.

## SAFETY

- Refer to the product SDS for all relevant safety information.
- Use only in well-ventilated areas.
- Wear chemically resistant rubber gloves, safety glasses, and an apron.
- Avoid prolonged or repeated contact with skin.
- In case of skin contact, wipe affected area with isopropyl alcohol, followed by soap and water.
- In case of eye contact, flush eyes with water for 15 minutes and consult a physician.
- If swallowed or comes into contact with eyes, seek medical attention immediately.

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- THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OR MECHANABILITY OR FOR ANY PARTICULAR PURPOSE. While all data presented in Seller's technical data sheet is based on the best information available to Seller and believed correct, such data is not to be construed as a warranty that the product will conform to such specifications. Such technical data sheets are subject to change without notice. Reported laboratory test results of fire redundancy in no way relates to the actual performance under fire conditions. Since all urethane systems are organic, they will burn.
- Reported laboratory test results of the color stability in no way relates to the actual performance upon exposure to light sources. Since all aromatic urethanes experience color degradation upon ultraviolet light exposure, Seller shall not be liable for any damages resulting from ultraviolet light color degradation of any aromatic urethane systems manufactured or sold by Seller.
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