

## Data Sheet

## AIRPAD HTX

A non-silicone tooling rubber for fabrication of caul sheets and flexible mandrels

### DESCRIPTION

Airpad HTX is an uncured, non-silicone rubber for manufacture of pressure caul sheets, flexible mandrels, and rubber tooling. Airpad HTX has been developed for longer service life and can be used with liquid release agents. Airpad HTX caul sheets improved part quality on the vacuum bag side of the part.

Airpad HTX pressure intensifier provides uniform pressure distribution during autoclave processing. Airpad HTX will take high temperature similar to silicone rubbers but will not cause silicone contamination. Airpad HTX can be reinforced with Airtech Toolmaster® Prepregs, which bond well and do not generate volatiles that could also cause delamination.

### BENEFITS

- Adheres well to A4000BOS and has a high temperature resistance for longer lasting caul sheet.
- Airpad HTX bonds to itself aggressively, making it easier to repair.
- Liquid release agents can be applied to cured Airpad HTX allowing for more complex intensifiers.

### TECHNICAL DATA

Properties listed are typical for the fully cured material

|                         |                                                                      | Test method |
|-------------------------|----------------------------------------------------------------------|-------------|
| Material type           | Uncured non-silicone rubber                                          |             |
| Colour                  | Grey                                                                 |             |
| Maximum use temperature | 204°C (400°F)                                                        |             |
| Elongation at break     | 550 %                                                                | ASTM D412   |
| Hardness                | 70 Shore A                                                           | ASTM D2240  |
| Tensile strength        | 13,1 MPa                                                             | ASTM D412   |
| Shelf life              | 24 months from date of shipment<br>when stored in original packaging |             |
| Storage conditions      | Do not freeze                                                        |             |

### SIZES

| Thickness             | Width              | Length            | Packaging Type |
|-----------------------|--------------------|-------------------|----------------|
| 1,59 mm (0,0625 inch) | 137 cm (54 inches) | 15,24 m (50 feet) | roll           |

### APPLICATION

Moulding Guidelines:

- Mould Airpad HTX off a part, dummy part or mould which is stable at high temperature and capable of high pressure.
- Airpad HTX has low tack, a light spray of Airtac 2 or use of a heat gun will aid layup onto vertical surfaces.
- Airpad HTX will have longer service life if covered with a release film such as Airtech A4000BOS bondable one side release film 50 µm (0,002 inches) thick, during the layup process.
- Liquid release agents should be tested prior to use on part manufacture. Consult Airpad HTX User Manual for detailed instructions.

Recommended Cure:

- Apply full vacuum throughout cure cycle and pressurise autoclave to 7 bar, minimum recommended pressure is 4 bar.
- Heat to 176°C and hold for 1 hour, then cool to room temperature before removing vacuum and demoulding from master mould.

### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Airtech recommends testing prior to use.