PRODUCT SUMMARY

# CYCOM® 2282 Ballistic Kevlar® Panels/Prepreg

CYCOM® 2282 ballistic prepreg and cured panels have been designed for use in the manufacture of ballistic armor. Currently used in military rotorcraft, this system presents excellent characteristics for use in commercial airliners, where maximum ballistic performance is required with minimal weight.

These materials have been tested and passed the compartment interiors requirements of FAR 25.853(d), Amendment 25-83, Appendix F, Parts I, IV and V, including the OSU heat release, vertical burn rate and NBS optical smoke density. CYCOM® 2282 modified phenolic resin is available in cured sheets and prepreg product forms. These materials can be used in the manufacture of cockpit doors, bulkheads, or other crew protection components. CYCOM® 2282 can be manufactured with various reinforcements including aramid, glass and polyethylene fabrics. Consult a Cytec Engineered Materials sales representative for additional information.

### Features and benefits

- Available in cured sheets or prepreg forms
- No curing required with cured sheets, simply cut to fit the specific application
- Provided in 4' x 8' cured sheets (can also be fabricated to custom specifications)
- Cured to custom thickness requirements and specified threat level
- Complimenting adhesive systems are available for CYCOM® 2282
- Passes compartment interiors requirements of FAR 25.853(d)
- Excellent ballistic performance, in accordance with N.I.J. STD. 0101-4, (Ref. FAA AC No. 25.795-2) Level IIIA
- Light-weight system offers minimum weight for maximum ballistic performance

| Form | Fabric | Weave style | Standard Dimensions |
|---|---|---|---|
| Cured Sheet | Aramid (14 oz./yd$^2$) | Plain and basket 2x2 | Cured 4' x 8' or<br>Cured 4' x (required length) |
| Prepreg | Aramid (14 oz./yd$^2$) | Plain and basket 2x2 | 38" wide and 50" wide |

| Flammability | Value | Mechanical | Value |
|---|---|---|---|
| **Vertical burn, 60 seconds** | | Tensile strength, R.T. (Ksi) | 73.2 |
| Burn length (inches | 0.0 | Tensile modulus, R.T. (Msi) | 1.2 |
| Extinguishing time (seconds) | 0.0 | Compression strength, R.T. (Ksi) | 6.3 |
| Drip extinguishing time (seconds) | 0.0 | Compression modulus, R.T. (Msi) | 1.5 |
| **NBS optical smoke density, flaming mode** | | Flexure strength, R.T. (Ksi) | 8.6 |
| $D_s$ at 90 seconds | 1.0 | Flexure modulus, R. T. (Msi) | 0.5 |
| $D_s$ at 4 minutes | 6.0 | Short beam shear, R.T. (Ksi) | 0.9 |
| **OSU heat release rate** | | | |
| Total heat release (Kw-min./m$^2$) | 23.7 | | |
| Peak heat release (Kw/m$^2$) | 1.8 | | |

**For more information, contact Joe Morris or Billy Harmon**
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*This information is provided for informational purposes only and without legal responsibility.*
*Users are expected to perform adequate verification and testing to ensure that materials meet required specifications.*

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