



Document No.: NMS 451/11, Revision B, November 8, 2023

NCAMP Material Specification

*This specification is generated and maintained in accordance with NCAMP
Standard Operating Procedures, NSP 100*

Medium Temperature, Out-of-Autoclave, Oven-Vacuum-Bag Cure Epoxy Resin
Impregnated Fiber Reinforced Composite Materials, Type 32, Class 1, Grade 145

Solvay (Formerly Cytec, Umeco Structural Materials (USM-OK), The Advanced
Composites Group (ACG)) MTM 45-1 AS4 Tape

Prepared by: Michelle Man, Vinsensius Tanoto, Yeow Ng, John Tomblin

Reviewed by: Royal Lovingfoss (NCAMP), Dusty Penn (Cytec), Clay Scoggins (Solvay)

The specification is intended for general distribution to the public, either freely or at a price that does not exceed the cost of reproduction (e.g. printing) and distribution (e.g. postage).

REVISIONS:

Rev	By	Date	Pages Revised or Added
N/C	Michelle Man, Vinsensius Tanoto, Yeow Ng, John Tomblin		

1. SCOPE:

1.1 Form:

This detail specification along with the base specification NMS

November 8, 2023

3.5.3 Cured Laminate Mechanical Properties:

TABLE 4 - Required Cured Laminate Tests for Mechanical Properties (Class 1)

Property	Test Method ⁽¹⁾	Requirements ⁽³⁾
0/90° Tension Strength and Modulus, Room Temperature Dry Layup: [0/90] _{4S} 90/0nTJ ET EMC /Span 5EMCW.	ASTM D3039	Strength ⁽²⁾ : Min. Ind. 15.3 ksi Strength ⁽²⁾ : Average 33.8 ksi Modulus ⁽²⁾ : 9.08 and 10.71 msi, avg.

November 8, 2023