



MTEC Mechanical Testing Services
 8676 Taub Rd. | Houston, Texas 77064
 281-469-2609

WRAITH™ Raw Material
Third Party Test: Compound D

ISO 9001-2008
 ISO/IEC 17025:2005
 ACCREDITED
LAB# W15014244
Certified
10-15-2015 11:32

Customer:

Phenom Innovations, LLC
221 W Airtex Blvd, Stes 105-110
Houston, TX 77090

PO NO PO-0001-Test
 PART NO Compound D
 QTC 12" long x 2.45 Dia
 MATL Type Aluminum Base
 SPEC Customer Supplied



TEST DATA

TENSILE

UTS PSI	YS.2% PSI	% EL	% RA	BAR DIA	ORIEN	LOC
29393	14066	11.35	14.36	0.4960"	Long	MR

COMPRESSION

YS.2% PSI	BAR DIA	ORIEN	LOC	LENGTH
14179	0.5040"	Long	MR	1.5"

WEIGHT LOSS

200 Degrees Fahrenheit for 8 hours. Weigh sample at beginning of test and at 1, 2, 3, 4, 6, and 8 hours.
 Specimen Dimensions: OUTER DIAMETER = 65.20 mm, THICKNESS = 13.40 mm
 Initial Weight = 117.089g

Hours Weight (g)

(1) 114.322 (2) 111.031
 (3) 104.663 (4) 97.899
 (6) 84.131 (8) 66.643

***** SEE ATTACHED REPORT *****

Billy Brown **Billy Brown, GENERAL MANAGER**

The recording of false, fictitious, or fraudulent statements or entries on this document may be punishable as a felony under federal statute.
 MTEC is accredited to ISO/IEC 17025:2005 for testing by PJA. Accreditation No 70049. Uncertainty information, pertinent to ISO 17025 Accredited Results, is available upon request.



RESULTS

Elapsed Time	O.D. (mm)	Thickness (mm)	Weight (g)	Temperature (°F)	Mass Loss (g)	Mass Loss/mm ²
0 Hour (start)	65.20	13.40	117.089	200	0	0
1 Hour	—	—	114.322	200	2.767	0.000293666
2 Hours	—	—	111.031	200	6.058	0.000642945
3 Hours	—	—	104.663	200	12.426	0.001318791
4 Hours	—	—	97.899	200	19.19	0.002036665
6 Hours	—	—	84.131	200	32.958	0.003497885
8 Hours	—	—	66.643	200	50.446	0.005353915

Surface Area (Start): **9422.30 mm²**

TEST PROCEDURE Actual test procedure for dissolve rates is unknown. Here is the test method we will use:

- Will cut samples from supplied material without the use of coolant.
This will be done at a band speed < 50 ipm to prevent overheating.
- Sample dimensions will be measured.
- Sample will be weighed in grams.
- Sample will then be immersed in **distilled water** at stated test temperature.
- Sample will be removed at the following elapsed times to measure the weight and recorded at: **1, 2, 3, 4, 6, and 8 Hours.**
If these do not produce a satisfactory curve, then customer will be contacted for further instructions.
- After 8 hours the sample will be rinsed in methanol and dried.
- Data will be graphed out on an excel spread sheet for each Compound and emailed to the customer.

MASS LOSS / mm²

