



Smithers MSE

1150 North Freedom Street

Ravenna, Ohio 44266

Tel: 330-762-7441

www.smithers.com

Client:	Omni United (S) Pte Ltd (PREPAY)	Quote Number:	25-1002932BT
Tracking Number:	2503629	Client Part Number:	NA
Test Description:	Measurement, Labeling, Bead Unseat	Client Project #:	NA

LABORATORY TEST REPORT - Measurement, Labeling, Bead Unseat

GENERAL INFORMATION

Test Type:	Bead Unseat	Test Number:	TRL-25-1404
Client Test Spec.:	FMVSS 139/109/119	Date Received:	4/23/2025
PO Number:	NA	Retread:	No
Wheel Size:	20x10.0 J (2407750)		

TIRE LABELING INFORMATION

Tire Brand:	AVIX	Load Index:	125
Tire Name:	TRAILTEK R/T	Speed Symbol:	Q
Tire Size:	35X12.50R20LT	Max Infl. (single):	80 PSI 550 kPa
DOT No.:	00K XY6UVL 4824	Max Infl. (dual):	NA NA
Construction:	R	Max. Load (single):	3640 lbs 1650 kg
Tube Type:	TL	Max. Load (dual):	NA NA
Load Range:	F	Regroovable:	NA
Ply Rating:	12	Treadwear Indicator:	Yes
No. Plies on S.W.:	3	Sidewall Color:	BW
No. Plies of Tread:	7	Street/Deep Tread:	ST
Max Speed:	NA	Temperature:	NA
Carc. Cord Matrl:	POLY	Treadwear:	NA
Belt Cord Matrl:	POLY,STL,NYL	Traction:	NA

PRETEST INSPECTIONS

Beads: No Visible Defects	Innerliner: No Visible Defects
Sidewall: No Visible Defects	Tread: No Visible Defects

DOT / TIN INFORMATION

	Inboard Side	Outboard Side	Meets Requirement
DOT	Yes	Yes	Yes
TIN	Partial	Full	Yes
Alpine Symbol	No	No	NA

CONDITIONING

	Date	Time	Pressure (PSI)	Temperature (°F)
Start	30-Apr-25	22:49	80.0	72.0
End	2-May-25	7:15	83.3	72.0
Conditioning Hours		32.43		

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LABORATORY TEST REPORT -- Measurements

MEASUREMENT ANALYSIS

Test Parameters

Wheel Size: 20x10.0 J (2407750) Test Pressure: 80 Air Gauge #: 136

Inflated Measurement (Required) (per T&RA, ETRTO, etc.)			
	USC	Metric	
Maximum Overall Diameter	35.10	(892 mm)	
Minimum Size Factor	46.35	(1177 mm)	
Maximum Overall Tire Width	13.50	(343 mm)	
Inflated Measurement (Actual)			
	USC	Metric	Meets Requirement
Overall Diameter	34.53	(877.1 mm)	YES
Actual Size Factor	47.28	(1200.9 mm)	YES
Maximum Overall Tire Width	12.77	(324.4 mm)	YES
Tread Radius	90+	(2286 mm)	
Weight	69.65	(31.6 kg)	
Tread Chord Width	10.20	(259.1 mm)	
Durometer	65	N/A	
Tread Arc Width	10.32	(262.1 mm)	
Tread Wear Indicator Height ≥ 0.0625 (in) & ≤ 0.0861 (in)	YES	N/A	

Overall Tire Width Measurements		
Location	inch	(mm)
DOT	12.72	(323.1 mm)
60°	12.77	(324.4 mm)
120°	12.76	(324.1 mm)
180°	12.76	(324.1 mm)
240°	12.74	(323.6 mm)
300°	12.72	(323.1 mm)
Average	12.75	(323.7 mm)
Maximum	12.77	(324.4 mm)

Tread Depth Measurements						
Location	FULL DEPTH		DEPTH TO BAR		TWI HEIGHT	
	inch	(mm)	inch	(mm)	inch	(mm)
DOT	0.565	(14 mm)	0.487	(12 mm)	0.078	(2 mm)
60°	0.564	(14 mm)	0.487	(12 mm)	0.077	(2 mm)
120°	0.569	(14 mm)	0.487	(12 mm)	0.082	(2 mm)
180°	0.564	(14 mm)	0.486	(12 mm)	0.078	(2 mm)
240°	0.566	(14 mm)	0.487	(12 mm)	0.079	(2 mm)
300°	0.569	(14 mm)	0.485	(12 mm)	0.084	(2 mm)
Average	0.566	(14 mm)	0.487	(12 mm)	0.080	(2 mm)

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This report has been prepared for
Omni United (S) Pte Ltd (PREPAY)
Veneesh Pillai
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Singapore

Approved By: George Gotzy

Date: 5/9/2025

Engineering Comments:

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LABORATORY TEST REPORT - Labeling

Requirements located on one sidewall-	Compliance:
The DOT symbol:	Yes, No, or N/A
Tire identification number(TIN): 00KXY6UUVL4824	Yes
Plant code (3 symbols)- The first group of the TIN, assigned to the manufacturer by NHTSA upon request	Yes
Manufacturer's code (6 symbols)- The second group of the TIN for all new tires, identifying significant characteristics or brand name owner	Yes
Date code (4 symbols)- The final group of the TIN, first 2 are week and second 2 are year produced	Yes
Requirements located on both sidewalls-	
Letters and numbers not less than .078 inches high and raised above or sunk below the tire surface	Yes
Tire size: <u>35x12.50R20LT</u>	Yes
Maximum load rating and corresponding maximum <u>3640</u> (1650) lbs (kg) <u>85 (550)</u> psi (kPa)	Yes
PASSENGER TIRES-	
If maximum inflation pressure is: 240,280,290,300,330,340,350, or 390 Kpa, then each marking of that inflation pressure must be followed in parenthesis by the equivalent PSI rounded to the next higher whole number and the maximum load must be followed in parenthesis by the equivalent load in pounds rounded to the nearest whole number:	N/A
Max single load _____	N/A
If maximum inflation pressure is 420 Kpa (60 PSI), then the tire must have permanently molded into or onto both sidewalls, in letters and numbers not less than 1/2 inch high, the words "Inflate to 60 PSI" or "Inflate to 420 Kpa (60 PSI)"	N/A
Tires other than passenger	
For LT tires - the maximum permissible inflation pressure shown must correspond to the maximum load of the tire size as specified in one of the publications described in S4.1.1(b) of 571.139 (Tire and Rim Association). At the manufacturers option, the shown inflation pressure may be as much as 10 PSI (69 KPA) higher.	Yes
Tires should be labeled as follows (marked on tires rated for single and dual load):	
Max single load _____	N/A
Max dual load _____	N/A
(Marked on tires rated for single load) (only one side)	
Max single load <u>1650 kg (3640 lbs.) at 550 kPa (80 psi) cold</u>	Yes
The speed restriction of the tire, if 55 mph, or less, shown as follows: MAX SPEED: _____ mph	N/A
Actual number of plies and the composition of the ply cord material in the sidewall, and, if different, in the tread area TR: <u>3 POLY + 2 STL + 2 NYL</u> SW: <u>3 POLY</u>	Yes
The words "tubeless" or "tube type" as applicable: <u>Tubeless</u>	Yes
The word "regrooveable" if tire is designed for regrooving: _____	N/A
The word "radial" if a radial tire: _____	Yes
The letter designating the tire load range: <u>F</u>	Yes

Comments:

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LABORATORY TEST REPORT - Bead Unseat

TEST SETUP PARAMETERS

Wheel Size:	20x10.0 J (2407750)	Bead Unseat Shoe:	2B	Bead Unseat Location:	
Test Inflation Pressure:	49.3 PSI	Air Gauge #:	136		13.5

Bead Unseat Measurement Results

Run #	Force		Comments
	(lbs)	(N)	
1	7,593	33,775	Unseat Point
2	7,595	33,784	Unseat Point
3	7,578	33,710	Unseat Point
4	7,516	33,432	Unseat Point
5	7,699	34,247	Unseat Point
Average Unseating Runs	7,596	33,790	
Minimum of Unseating Runs	7,516	33,432	

Required Minimum Force: 2,500 lbs 11121 N
Minimum of All Runs: 7,516 lbs 33432 N
Minimum Force Met: YES -- MINIMUM BEAD UNSEAT FORCE EXCEEDED

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Engineering Comments:

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Tracking Number: 2503629

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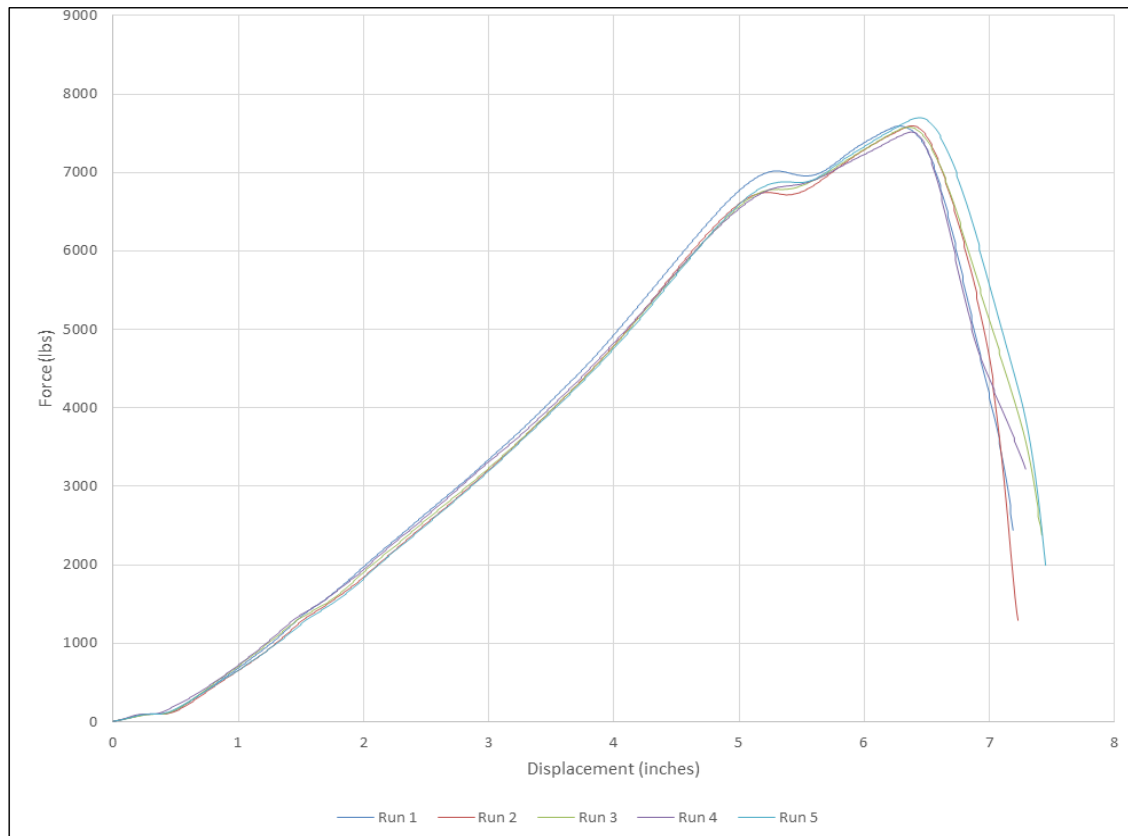
Quote Number: 25-1002932BT

Client Part Number: NA

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LABORATORY TEST REPORT - Bead Unseat

BEAD UNSEAT



Bead Unseat Chart of Runs
Figure 1