



## This MotoCAP safety rating applies to:

Brand Bikers Gear

Model Hobart

Type Pants - Leather

Date purchased 1 June 2023

Sizes tested 36 and 38

Test garment gender Male

Style All Purpose RRP \$229.00

Test Results Summary	Rating	Score
MotoCAP Protection Rating	*	24.9
Abrasion	3/10	2.75
Burst	10/10	1116
Impact	0/10	0.0
MotoCAP Breathability Rating	**	0.358
Moisture Vapour Resistance	-	40.8
Thermal Resistance	-	0.243
Water resistance	N/A	N/A

There are no pockets provided at the knees or hips for fitting aftermarket impact protectors. There are no vents to allow airflow movement through the garment.

## **Jacket and Pants - Crash Impact Risk Zones**

This diagram is a pictorial representation of the crash impact risk Zones.

		Removable Thermal line Water-resists Removable Knee Hip	r 🔲
Zone 1	Zone 2	Zone 3	Zone 4
High risk of abrasion High risk of impact	High risk of abrasion	Medium risk of abrasion	Low risk of abrasior



#### **Abrasion Resistance**

These pants were tested for abrasion resistance in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely abrasion performance of the materials in each zone calculated from the data in the table below. The colour coding is based on the worst performing material in each zone.



#### **Abrasion Resistance Performance**

Abrasion rating	3/10
Abrasion score	2.75

<b>Determining Criteria</b>	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zones 1 & 2	> 5.6	3.0 - 5.6	1.3 - 2.9	< 1.3
Medium abrasion risk	Zone 3	> 2.5	1.8 - 2.5	0.8 - 1.7	< 0.8
Low abrasion risk	Zone 4	>1.5	1.0 - 1.5	0.4 - 0.9	< 0.4

**Individual Abrasion Resistance Results:** - The table below shows the test results for time to abrade through all layers of the materials. Calculated for each sample by Zone, type and area coverage of each material as a proportion of that Zone. Abrasion times are capped at a maximum of 10.00s.

#### Abrasion time for each test (seconds)

Zones 1 & 2	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	90%	5.59	2.62	1.38	3.08	2.17	2.05	2.82	М
Material B	10%	2.43	2.39	3.24	2.17	3.16	1.86	2.54	М
Zone 3	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	75%	5.59	2.62	1.38	3.08	2.17	2.05	2.82	G
Material B	25%	2.43	2.39	3.24	2.17	3.16	1.86	2.54	G
Zone 4	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	50%	5.59	2.62	1.38	3.08	2.17	2.05	2.82	G
Material B	50%	2.43	2.39	3.24	2.17	3.16	1.86	2.54	G

#### Details of materials used in pant

Material A Leather shell with fabric inner liner

Material B Leather shell



# **Burst Strength**

These pants were tested for burst strength in accordance with MotoCAP test protocols. The diagram below illustrates the burst strength results in terms of the likely performance of the garment in an impact and is a pictorial representation of the data from the table below.



**Burst Strength Performance** 

Burst rating	10/10
Burst score	1116

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor
Burst strength	(kPa)	> 1000	800 - 1000	500 - 799	< 500

**Individual Burst Strength Results:** - The table below shows the burst pressure in kilopascals (kPA) for each sample tested by Zone and the average result for each zone.

## Burst pressure for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	570	1445	1046	726	1391	1720	1150	G
Zones 3 & 4	973	569	1113	891	1650	685	980	Α



#### **Impact Protection**

These pants were not tested for impact protection as impact protectors were not provided with the garment. The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table below. The colour coding is based on the worst performing score for average or maximum force for each impact zone. Areas shaded black are not considered for impact protection ratings.



# Impact Protection Performance

Impact rating	0/10
Impact score	0.0

<b>Determining Criteria</b>	Unit	Good	Acceptable	Marginal	Poor*
Impact force	(kN)	< 15	15 - 24	25 - 30	> 30

<sup>\*</sup> Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

**Impact Protector Results:** - The table below shows the average and maximum force transmitted through each impact protector type in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Knee	Hip
Average force (kN)	P	P
Maximum force (kN)	P	Р
Coverage of Zone 1 area	0%	0%
Coverage of Zone after displacement	0%	0%

**Individual Impact Protector Results:** - The table below shows the test results for each strike on individual impact protectors in kilonewtons (kN) and the position of the strike. Individual strike results are capped at a maximum of 50kN.

## Force transfer for each impact strike (kN)

Impact Protector 3

Impact protector type	Knee	No impact protector present		Hip	No impact pro	tector present
Strike location	Centre	Mid	Edge	Centre	Mid	Edge
Impact Protector 1						
Impact Protector 2						



## **Breathability**

These pants were tested for breathability following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

Without removable liners		With water-resistant liner		
Breathability rating	**	Breathability rating		N/A
Breathability score	0.358	Breathability score N/A		
Moisture Vapour Resistance - R <sub>et</sub> (kPa.m <sup>2</sup> /W)		1	2	Average
Without removable liners		40.1	41.4	40.8
With water-resistant liner		N/A	N/A	N/A
Thermal Resistance - R <sub>ct</sub> (K.m²/W)		1	2	Average
Without removable liner	S	0.245	0.240	0.243
With water-resistant liner		N/A	N/A	N/A

# Water spray and rain resistance

This pants have not been advertised as water-resistant so has not been tested for water spray and rain resistance.

## **Assessment Details.**

Brand Bikers Gear Model Hobart

Type Pants - Leather Date purchased 1 June 2023

Tested by AMCAF, Deakin University Report approved by MotoCAP Chief Scientist

Garment test reference P23L02
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