This MotoCAP safety rating applies to:

Brand:	Ixon
Model:	Fueller Air
Type:	Jacket - Leather
Date purchased:	18 July 2018
Sizes tested:	L
Gender:	M
Style:	Sports
Test code:	J18L06

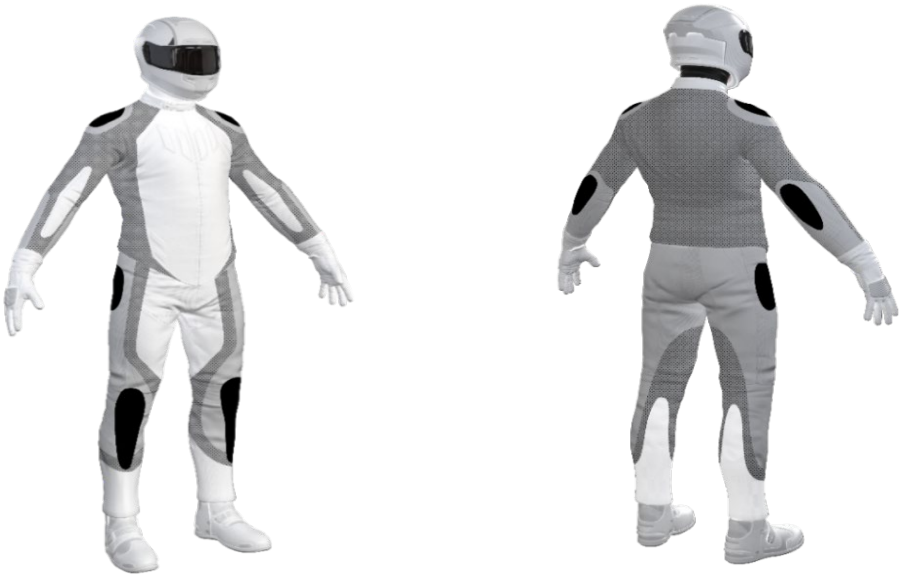
Test Results Summary:

	Rating	Result
MotoCAP Protection Rating	★★★★	52.1
Abrasion	6/10	4.88
Burst	10/10	1339
Impact	7/10	47.7
MotoCAP Comfort Rating	★★	0.347
Moisture Vapour Resistance		41.3
Thermal Resistance		0.239
Water Resistance	N/A	

This garment is fitted with impact protectors for the elbows, shoulders and back. The garment has perforated leather on the chest, the lower back and under the arms to aid cooling in hot weather.

Jacket and Pants - Crash Impact Risk Zones

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



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 abrasion

Abrasion Resistance

The garment was tested for abrasion resistance following the MotoCAP test protocols. 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.

Details of materials used in garment:

Material A:	Single layer of leather outer and mesh inner liner
Material B:	Single layer of perforated leather outer and mesh inner liner

Zone	Coverage (%)	Abrasion time for each test (s) 1	2	3	4	5	6	Average (s)	
Zone 1 and 2 areas (High abrasion risk)									
Material A	100%	4.84	5.56	5.93	6.14	5.04	4.85	5.39	A
Zone 3 area (Medium abrasion risk)									
Material A	30%	4.84	5.56	5.93	6.14	5.04	4.85	5.39	G
Material B	70%	4.42	3.34	4.44	2.18	2.22	3.45	3.34	G
Zone 4 area (Low abrasion risk)									
Material A	50%	4.84	5.56	5.93	6.14	5.04	4.85	5.39	G
Material B	50%	4.42	3.34	4.44	2.18	2.22	3.45	3.34	G

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 above.

Determining Criteria		Good	Acceptable	Marginal	Poor
High abrasion risk	Zone 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

Burst Strength

The garment's burst strength was tested following the MotoCAP test protocols. 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 (kPA)

Area	1	2	3	4	5	Average	
Zones 1 & 2	1747	1912	408	1865	963	1483	G
Zone EZ	1488	1121	1256	1954	628	1289	G
Zones 3 & 4	1371	714	1024	1112	1526	1149	G

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 above.

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

Impact Protection

The garment was tested for impact protection and coverage following the MotoCAP test protocols. The table below shows the test results for each strike on each impact protector in kilonewton (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Elbow		Shoulder	
Average force	10.8	G	10.7	G
Maximum force	20	A	13.4	G
Coverage of zone 1 area	90%		100%	
Coverage of zone after displacement	70%		100%	

Individual test results

Impact force (kN)	Elbow			Shoulder		
Strike location	**A**	**B**	**C**	**A**	**B**	**C**
Impact Protector 1	9.4	9.6	20.0	10.8	13.0	11.1
Impact Protector 2	7.5	8.9	10.4	9.8	10.1	8.9
Impact Protector 3	8.5	11.1	11.9	8.1	13.4	10.9

The diagram below is a visual indication of the likely impact performance of each impact protector calculated from the data in the table above.

Determining Criteria		Good	Acceptable	Marginal	Poor*
Burst strength	(kN)	< 15	15 - 24	25 - 30	> 30

* Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

Thermal comfort

The garment was tested for thermal comfort following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

	1	2	**Average**
Moisture Vapour Resistance - R_{et} ($kPam^2/W$)	50.5	32.2	41.3

	1	2	**Average**
Thermal Resistance - R_{ct} (Km^2/W)	0.247	0.230	0.239

Water spray and rain resistance

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

Assessment Details.

Brand	Ixon
Model	Fueller Air
Type	Jacket - Leather
Date purchased	18 July 2018
Tested by	AMCAF, Deakin University
Garment test reference	J18L06
Rating first published	October 2018
Rating updated	1 October 2021