This MotoCAP safety rating applies to:

Brand:	Saint
Model:	Model 2
Type:	Pants - Denim
Date purchased:	4 July 2018
Sizes tested:	36
Gender:	M
Style:	All Purpose
Test code:	P18D02

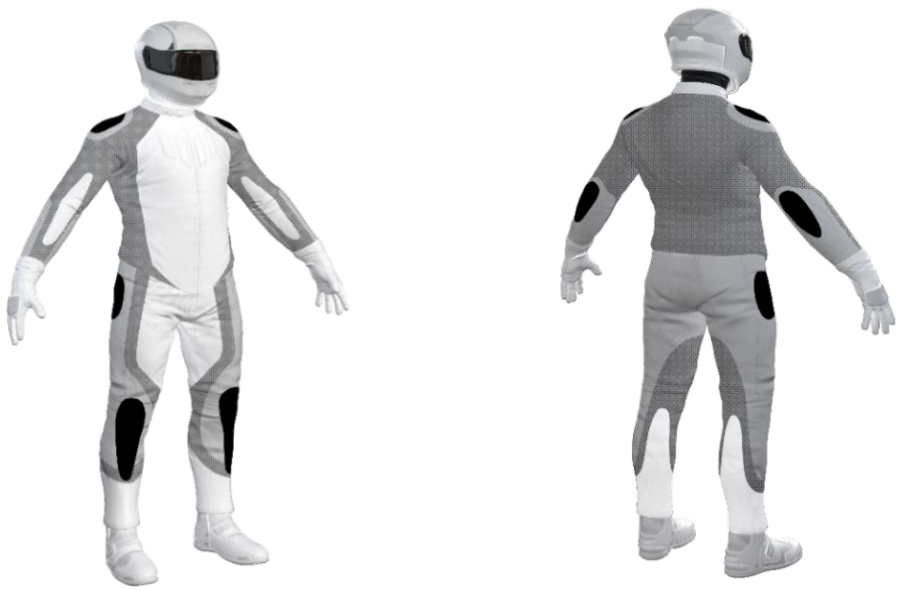
Test Results Summary:

	Rating	Result
MotoCAP Protection Rating	★★	39.5
Abrasion	1/10	1.16
Burst	8/10	900
Impact	7/10	52.4
MotoCAP Comfort Rating	★★★	0.500
Moisture Vapour Resistance		19.0
Thermal Resistance		0.158
Water Resistance	N/A	

This garment is fitted with impact protectors for the knees and hips.

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 denim with black outer and white shiny inner yarn
Material B:	Single layer of denim with black outer and yellow inner yarn

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%	1.85	0.96	0.88	1.93	1.39	2.09	1.51	M
Zone 3 area (Medium abrasion risk)									
Material B	100%	1.00	0.62	0.50	0.57	0.44	0.66	0.63	P
Zone 4 area (Low abrasion risk)									
Meterial B	100%	1.00	0.62	0.50	0.57	0.44	0.66	0.63	M

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	821	852	664	961	923	844	A
Zone EZ	831	1247	816	737	965	919	A
Zones 3 & 4	968	1132	813	1095	845	971	A

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 in percentage (%) within the Zone.

Impact protector type	Knee		Hip	
Average force (kN)	11.8	G	12.9	G
Maximum force (kN)	19.1	A	21.2	A
Coverage of zone 1 area	70%		150%	
Coverage of zone after displacement	70%		100%	

Individual test results

Impact force (kN)	Knee			Hip		
Strike location	A	B	C	A	B	C
Impact Protector 1	11.0	11.3	19.1	10.8	10	21.2
Impact Protector 2	11.2	11.4	9.1	11.4	10.6	10.8
Impact Protector 3	10.0	11.2	12.1	11.0	11.6	18.3

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} ($kPam^2/W$)	19.7	18.3	19.0

	1	2	Average
Thermal Resistance - R_{ct} (Km^2/W)	0.159	0.157	0.158

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.