


This MotoCAP safety rating applies to:

Brand: Alpinestars
Model: Chrome Sport Hoodie
Type: Jacket - Textile
Date purchased: 11 August 2018
Sizes tested: XL
Gender: M & F
Style: All Purpose
Test code: J18T06

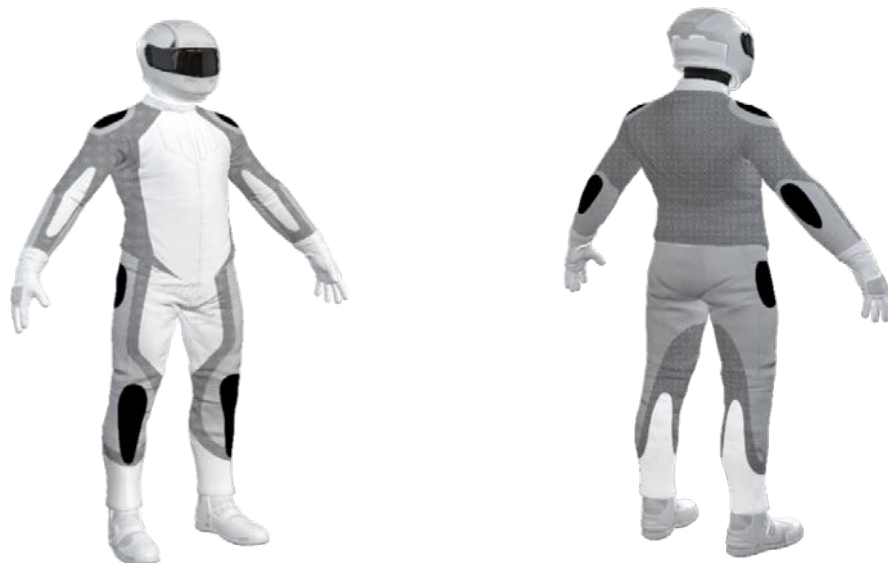
Test Results Summary:

	Rating	Score
MotoCAP Protection Rating	★	23.3
Abrasion	1/10	0.63
Burst	8/10	824
Impact	5/10	39.6
MotoCAP Comfort Rating	★★	0.434
Moisture Vapour Resistance		35.2
Thermal Resistance		0.255
Water resistance	N/A	N/A

This garment is fitted with impact protectors for the elbows and shoulders, with a pocket provided for the addition of an aftermarket back protector. The fleece fabric this garment is made from would allow airflow through the entire garment 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

 High risk of abrasion
 High risk of impact

Zone 2


High risk of abrasion

Zone 3


Medium risk of abrasion

Zone 4


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:	Fleece fabric shell, with aramid fabric layer and fabric liner
Material B:	Fleece fabric shell with fabric liner
Material C:	Fleece fabric shell, with aramid fabric layer and mesh liner
Material D:	Fleece fabric shell with mesh liner

Zone	Coverage (%)	Abrasion time for each test (seconds)						Average (seconds)	
		1	2	3	4	5	6		
Zone 1 and 2 areas (High abrasion risk)									
Material A	75%	1.62	1.49	1.59	1.11	0.59	0.87	1.21	P
Material B	25%	0.54	0.46	0.21	0.43	0.33	0.24	0.37	P
Zone 3 area (Medium abrasion risk)									
Material C	50%	1.60	1.13	1.00	1.73	1.11	0.93	1.25	M
Material B	50%	0.54	0.46	0.21	0.43	0.33	0.24	0.37	P
Zone 4 area (Low abrasion risk)									
Material D	100%	0.56	0.31	0.23	0.50	0.28	0.50	0.39	P

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. The colour coding is based on the worst performing material in each zone.



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	919	1288	807	883	681	916	A
Zone EZ	732	706	771	671	656	707	M
Zones 3 & 4	833	868	884	907	890	876	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

Burst strength



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 (kN)	20.9	A	24.4	A
Maximum force (kN)	26.7	M	29.4	M
Coverage of zone 1 area	140%		120%	
Coverage of zone after displacement	60%		110%	

Individual test results

Impact force (kN)	Elbow			Shoulder		
	A	B	C	A	B	C
Impact Protector 1	14.9	20.5	24.6	19.4	22.6	24.9
Impact Protector 2	15.3	21.8	24.9	25.9	24.3	29.4
Impact Protector 3	15.6	23.4	26.7	23.0	22.0	28.1

The diagram below is a visual indication of the likely impact performance of each impact protector calculated from the data in the table above. The colour coding is based on the worst score for force transmitted (average or maximum) in each impact zone.



Determining Criteria	Good	Acceptable	Marginal	Poor*
Impact force (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)	32.1	38.3	35.2
	1	2	Average
Thermal Resistance - R_{ct} (Km ² /W)	0.236	0.273	0.255

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.