


**This MotoCAP safety rating applies to:**

**Brand:** DriRider  
**Model:** Vortex Adventure 2  
**Type:** Pants - Textile  
**Date purchased:** 17 October 2018  
**Sizes tested:** 54  
**Gender:** M & F  
**Style:** Tourer  
**Test code:** P18T02

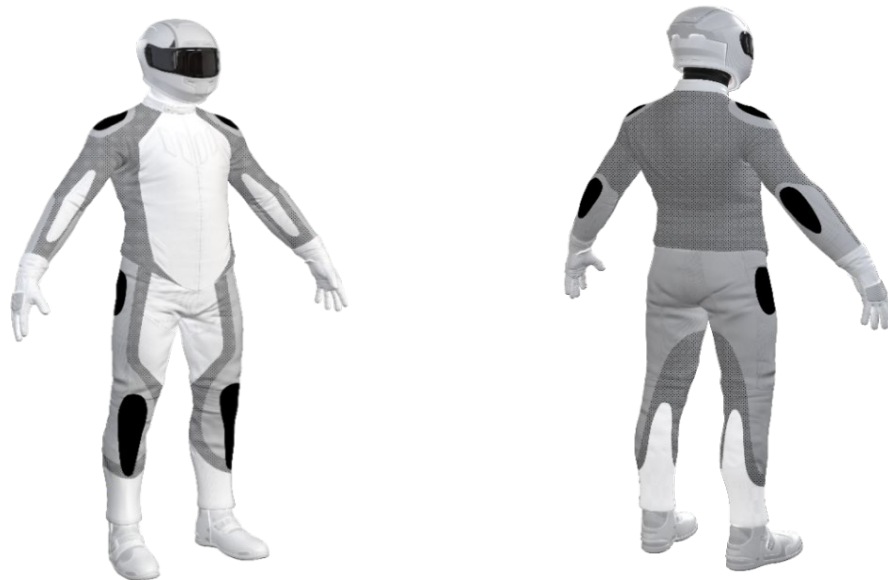
**Test Results Summary:**

|                            | Rating | Score |
|----------------------------|--------|-------|
| MotoCAP Protection Rating  | ★      | 20.4  |
| Abrasion                   | 1/10   | 0.90  |
| Burst                      | 10/10  | 1586  |
| Impact                     | 1/10   | 0.0   |
| MotoCAP Comfort Rating     | ★      | 0.277 |
| Moisture Vapour Resistance |        | 50.8  |
| Thermal Resistance         |        | 0.199 |
| Water resistance           | 9/10   | 2.1   |

This garment is fitted with impact protectors for the knees and with pockets for aftermarket impact protectors for the hips. This garment has vents in the upper thigh areas to aid cooling in hot weather. Comfort measurements were conducted with the removable waterproof membrane installed. The thermal comfort of this product would be better in dry conditions without the waterproof liner installed.

**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

**Abrasion Resistance**
**Zone 2**


High risk of abrasion

**Zone 3**


Medium risk of abrasion

**Zone 4**


Low risk of abrasion

The garment was tested for abrasion resistance in accordance with 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: Coarse weave polyester fabric shell and mesh inner liner
- Material B: Woven polyester fabric shell and mesh inner liner
- Material C: Stretch fabric shell and mesh inner liner

| Zone   | Coverage (%) | Abrasion time for each test (seconds) |      |      |      |      |      | Average (seconds) |   |
|--|--------------|---------------------------------------|------|------|------|------|------|-------------------|---|
|  |              | 1                                     | 2    | 3    | 4    | 5    | 6    |                   |   |
| <b>Zone 1 and 2 areas (High abrasion risk)</b> |              |                                       |      |      |      |      |      |                   |   |
| Material A                                     | 40%          | 0.65                                  | 0.69 | 1.58 | 0.82 | 1.07 | 1.81 | 1.10              | P |
| Material B                                     | 60%          | 1.19                                  | 0.69 | 0.89 | 0.82 | 1.09 | 1.22 | 0.98              | P |
| <b>Zone 3 area (Medium abrasion risk)</b>      |              |                                       |      |      |      |      |      |                   |   |
| Material B                                     | 70%          | 1.19                                  | 0.69 | 0.89 | 0.82 | 1.09 | 1.22 | 0.98              | P |
| Material C                                     | 30%          | 0.52                                  | 0.34 | 0.39 | 0.36 |      |      | 0.40              | P |
| <b>Zone 4 area (Low abrasion risk)</b>         |              |                                       |      |      |      |      |      |                   |   |
| Material B                                     | 100%         | 1.19                                  | 0.69 | 0.89 | 0.82 | 1.09 | 1.22 | 0.98              | 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. 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 in accordance with 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 | 663  | 1320 | 1068 | 1644 | 1941 | 1327    | G |
| Zone EZ     | 1940 | 1938 | 1470 | 1270 | 1940 | 1712    | G |
| Zones 3 & 4 | 1906 | 1656 | 1823 | 1933 | 1935 | 1850    | 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 | Burst strength (kPa)  |   |  |   |
|----------------------|---|---|--|---|
|                      | Good  | Acceptable  | Marginal   | Poor  |
|                      |  |  |  |  |
|                      | > 1000  | 800 - 1000  | 500 - 799  | < 500   |

### Impact Protection

The garment was tested for impact protection and coverage in accordance with 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               | Knee |      |      | Hip                         |   |   |
|-------------------------------------|------|------|------|-----------------------------|---|---|
| Average force (kN)                  | 29.2 | M    |      | P                           |   |   |
| Maximum force (kN)                  | 34.0 | P    |      | P                           |   |   |
| Coverage of zone 1 area             | 110% |      |      | 0%                          |   |   |
| Coverage of zone after displacement | 10%  |      |      | 0%                          |   |   |
| <b>Individual test results</b>      |      |      |      |                             |   |   |
| Impact force (kN)                   | Knee |      |      | Hip                         |   |   |
| Strike location                     | A    | B    | C    | No impact protector present |   |   |
|                                     | A    | B    | C    | A                           | B | C |
| Impact Protector 1                  | 25.4 | 30.1 | 26.7 |                             |   |   |
| Impact Protector 2                  | 28.0 | 32.7 | 23.4 |                             |   |   |
| Impact Protector 3                  | 28.5 | 33.7 | 34.0 |                             |   |   |

The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table above. The colour coding is based on the worst performing score for average or maximum force for 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 - $R_{et}$<br>(kPam <sup>2</sup> /W) | 52.1 | 49.5 | 50.8    |

|   | 1     | 2     | Average |
|---|-------|-------|---------|
| Thermal Resistance - $R_{ct}$<br>(Km <sup>2</sup> /W) | 0.195 | 0.203 | 0.199   |

### Water spray and rain resistance

This garment is advertised as water-resistant, and so has been tested for water spray and rain resistance according to the MotoCAP test protocols. The table below shows the increased weight (g) and proportion (%) of the garment and undergarments due to water absorption.

|                | Water absorbed by garment |                | Water absorbed by underwear |                |
|----------------|---------------------------|----------------|-----------------------------|----------------|
|                | Mass (g)                  | Percentage (%) | Mass (g)                    | Percentage (%) |
| Pants 1        | 873.8                     | 53%            | 5.1                         | 2%             |
| <b>Average</b> | 873.8                     | 53%            | 5.07                        | 2%             |

### Location of wetting:

There was no visible wetting evident on the cotton undergarments worn under the motorcycle water resistant pants after testing.