

MOTOCAP

| Model                  | District Wax Reinforced C |           |             |
|------------------------|---------------------------|-----------|-------------|
| Type                   | Jacket - Textile          |           |             |
| Date purchased         | 6 March 2023              |           |             |
| Sizes tested           | L                         |           |             |
| Test garment gender    | Male                      |           |             |
| Style                  | Streetwear                |           |             |
| RRP                    | \$379.00                  |           |             |
|                        |                           |           |             |
| Test Results Summary   |                           | Rating    | Score       |
| Test Results Summary   | ing                       | Rating    | Score       |
| MotoCAP Protection Rat |                           | ★★        | 30.0        |
|                        | ing                       |           |             |
| MotoCAP Protection Rat | ing                       | **        | 30.0        |
| MotoCAP Protection Rat | ing                       | <b>★★</b> | <b>30.0</b> |
| Abrasion               |                           | 2/10      | 1.40        |
| MotoCAP Protection Rat |                           | ★★        | <b>30.0</b> |
| Abrasion               |                           | 2/10      | 1.40        |
| Burst                  |                           | 10/10     | 1121        |
| MotoCAP Protection Rat | ating                     | ★★        | <b>30.0</b> |
| Abrasion               |                           | 2/10      | 1.40        |
| Burst                  |                           | 10/10     | 1121        |
| Impact                 |                           | 5/10      | 39.1        |

N/A

N/A

This MotoCAP safety rating applies to:

RST

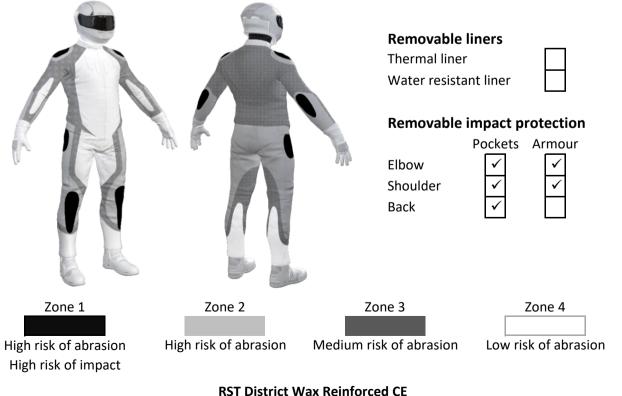
Brand

This garment is fitted with impact protectors for the elbows and shoulders. A pocket is provided for an aftermarket back protector. There are no vents to allow airflow movement through the garment.

Water resistance

## Jacket and Pants - Crash Impact Risk Zones

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



RST District Wax Reinforced CE Textile Jacket



### **Abrasion Resistance**

The jacket was 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 rating | 2/10 |
|-----------------|------|
| Abrasion score  | 1.40 |

| <b>Determining Criteria</b> | Area       | 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 |

**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)

| Zone 1 & 2 | Coverage (%) | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Average |
|------------|--------------|----------|----------|----------|----------|----------|----------|---------|
| Material A | 80%          | 4.75     | 4.32     | 3.77     | 2.05     | 3.05     | 2.92     | 3.48 A  |
| Material B | 20%          | 0.60     | 0.85     | 0.55     | 0.76     | 0.49     | 0.54     | 0.63 P  |
| Zone 3     | Coverage (%) | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Average |
| Material B | 60%          | 0.60     | 0.85     | 0.55     | 0.76     | 0.49     | 0.54     | 0.63 P  |
| Material C | 40%          | 0.58     | 0.48     | 0.47     | 0.49     | 0.44     | 0.50     | 0.49 P  |
| Zone 4     | Coverage (%) | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Average |
| Material B | 80%          | 0.60     | 0.85     | 0.55     | 0.76     | 0.49     | 0.54     | 0.63 M  |
| Material C | 20%          | 0.58     | 0.48     | 0.47     | 0.49     | 0.44     | 0.50     | 0.49 M  |

#### Details of materials used in jacket

| Material A | Waxed woven fabric shell, para-aramid layer and woven fabric inner liner |
|------------|--|
| Material B | Waxed woven fabric shell with mesh inner liner                           |
| Material C | Waxed woven fabric shell with woven fabric inner liner                   |



# **Burst Strength**

The jacket was 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                | 1121  |  |  |  |  |

| <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.

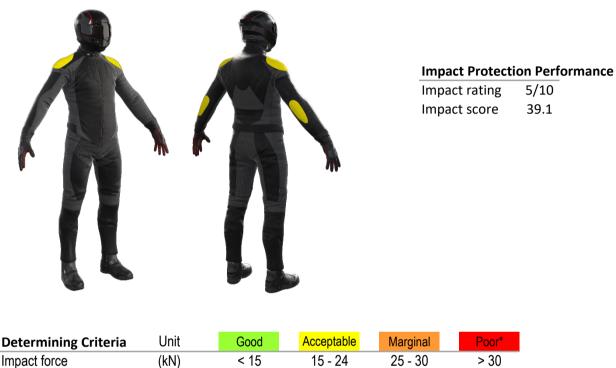
# Burst pressure for each seam (kPA)

| Area        | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Average |   |
|-------------|----------|----------|----------|----------|----------|----------|---------|---|
| Zones 1 & 2 | 1271     | 1424     | 894      | 900      | 1543     | 906      | 1156    | G |
| Zones 3 & 4 | 751      | 747      | 1088     | 544      | 1409     | 1336     | 979     | Α |



### **Impact Protection**

The jacket was tested for impact protection and coverage in accordance with MotoCAP test protocols. 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.



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

**Individual Impact Protector Results:** - The table below shows the test results for each strike on each impact protector in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone. Individual strike results are capped at a maximum of 50kN.

| Impact protector type               | Elbow |   | Shoulder |
|-------------------------------------|-------|---|----------|
| Average force (kN)                  | 21.9  | A | 21.6 A   |
| Maximum force (kN)                  | 24.1  | A | 22.7 A   |
| Coverage of Zone 1 area             | 115%  |   | 90%      |
| Coverage of Zone after displacement | 100%  |   | 90%      |

**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 type | Elbow  | Shoulder |      |        |      |      |
|-----------------------|--------|----------|------|--------|------|------|
| Strike location       | Centre | Mid      | Edge | Centre | Mid  | Edge |
| Impact Protector 1    | 20.9   | 23.2     | 22.1 | 21.3   | 22.3 | 22.7 |
| Impact Protector 2    | 20.8   | 22.3     | 21.6 | 21.0   | 19.9 | 22.1 |
| Impact Protector 3    | 20.9   | 21.7     | 24.1 | 22.6   | 22.0 | 20.6 |



### Breathability

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

| Without removable I       | With                                | With water-resistant liner |                  |         |
|---------------------------|-------------------------------------|----------------------------|------------------|---------|
| Breathability rating      | **                                  | Brea                       | thability rating | N/A     |
| Breathability score       | 0.356                               | Brea                       | thability score  | N/A     |
| Moisture Vapour Resis     | stance - R <sub>et</sub> (kPa.m²/W) | 1                          | 2                | Average |
| Without removable liner   | S                                   | 41.0                       | 41.1             | 41.1    |
| With water-resistant line | Pr                                  | N/A                        | N/A              | N/A     |
| Thermal Resistance -      | R <sub>ct</sub> (K.m²/W)            | 1                          | 2                | Average |
| Without removable liner   | S                                   | 0.240                      | 0.248            | 0.244   |
| With water-resistant line | PL                                  | N/A                        | N/A              | N/A     |

### Water spray and rain resistance

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

## **Assessment Details.**

| Brand                  | RST                        |
|------------------------|----------------------------|
| Model                  | District Wax Reinforced CE |
| Туре                   | Jacket - Textile           |
| Date purchased         | 6 March 2023               |
| Tested by              | AMCAF, Deakin University   |
| Report approved by     | MotoCAP Chief Scientist    |
| Garment test reference | J23T07                     |
| Rating first published | July 2023                  |
| Rating updated         | 11 July 2023               |