

Absorbency of oil-only socks and pillows

Gravimetric determination in diesel · in-house testing

SPECIMENS

n = 5

1 – PURPOSE AND STATUS

To record the absorbency of our material under one repeatable procedure, and to name that procedure so a buyer can run it again.

This is **in-house testing by the manufacturer**, not an accredited laboratory report. It is issued so that a buyer can reproduce it. Independent verification is scheduled and will supersede this revision.

2 – METHOD

Basis	Own procedure, following the principles of ASTM F726
Fluid	Automotive diesel, density taken as 0.84 kg/L
Conditioning	Ambient, approx. 20 °C
Procedure	Weigh dry · immerse fully 15 min · suspend and free-drain · reweigh. Capacity = (wet – dry) / dry.
Drain time	30 s — the period ASTM F726 sets for light oils, which is what diesel is. Two minutes applies to heavy oils. Both were run, and the drain used is given against each row below.
Replicates	Socks n = 3 — one at 30 s, two at 2 min. Pillows n = 2 — one per drain. Replicate testing at n = 3 per drain time on the production run is outstanding.
Tested by	Our own staff, UK warehouse
Dates	September 2026
Basis of capacity	Per gram of finished product, sleeve included — not per gram of fill

3 – RESULTS, ABSORBENT SOCKS

SPECIMEN	DRAIN	G/G	L/KG	L / PIECE
Absorbent sock	30 s	8.72	10.4	3.7
Absorbent sock	2 min	8.05	9.6	3.4

Capacity is per gram of finished product. The 2 min row is the mean of two specimens, the 30 s row a single specimen. Litres per piece are these figures at the nominal **355 g** of article SL-S-70-1200-355. TDS-01 publishes 8.5 g/g and 3.6 L, rounded down from these.

Check the fluid and the drain before you compare. A capacity figure means nothing without both. The same piece weighed at lift, at thirty seconds and at two minutes gives three different numbers. A thin oil drains away; a viscous one stays. Ours are measured on **diesel**, one of the thinnest fluids a sorbent is asked to hold, and both drains are given above. Ask any supplier for the same two facts.

4 – RESULTS, ABSORBENT PILLOWS

SPECIMEN	DRAIN	G/G	L/KG	L / PIECE
Absorbent pillow	30 s	8.40	10.0	2.1
Absorbent pillow	2 min	7.55	9.0	1.9

Weighed by us in the UK, one specimen per drain. Litres per piece at the nominal **210 g** of article SL-P-250-200-210. Other pillow formats are made to order and are not covered by this report.

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Figures here are typical, not guaranteed minima. The guaranteed minima are given in TDS-01 and TDS-02.

Results and findings

What the measurements show

5 – WATER BEHAVIOUR

A finished sock was placed in water and observed. It floated on the surface and released no water when lifted. This is a **qualitative observation confirming oil-selective behaviour**, not a gravimetric water pick-up measurement; the latter is outstanding.

6 – CONCLUSIONS

- 01 The sock retains **8.72 g/g** at a 30 s drain and 8.05 g/g at 2 min. At its 355 g piece mass that is **3.6 L per sock**.
- 02 The 250 × 200 pillow retains **8.40 g/g** at 30 s and 7.55 at 2 min — **2.1 L per pillow**.
- 03 The material is **oil-selective**: it floats and shed no water when lifted. Water pick-up has not yet been measured gravimetrically.
- 04 Capacity per gram falls as fill is packed tighter. Specify by **litres required**, not by weight of sorbent.

7 – OUTSTANDING WORK

Production run	Three socks and three pillows from the first production run, weighed dry and at both 30 s and 2 min drain, reported with mean and range
Additional fluids	Hydraulic oil, engine oil 15W-40, and deionised water for a measured zero
Independent testing	Third-party laboratory verification of the production fill
Batch traceability	Batch number recorded against each test from the first production run
Compression trial	Effect of vacuum compression on recovered loft after storage and re-expansion

Each will be added to this report as it completes. A buyer who needs a particular fluid tested before committing should ask — we would rather run it than estimate it.

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Secure Trading Solutions Limited, trading as Sorbloft

Registered in England and Wales · No. **12572228** · VAT **GB 349179266**

sales@sorbloft.com · +44 7864 637823 · sorbloft.com

This report records our own measurements and is issued in good faith. It is not an accredited test certificate. Values are typical and do not constitute a warranty. Suitability for a particular application is the responsibility of the user.

MEASUREMENTS MADE AND REPORT ISSUED BY SORBLOFT

RELATED DOCUMENTS — TDS-01 SOCK · TDS-02 PILLOW · SD-01 SAFETY AND DISPOSAL