



Spill Soak® v's Other Generic Organic Absorbents

This report presents a comparative analysis of the absorbency efficiency of Spill Soak®, our proprietary organic general purpose absorbent product, against a competitor's absorbent. The testing by a NATA accredited body assessed the performance of these products in handling two types of spills: Engine Oil (20W 50) and a Water + 20% Detergent mixture, representative of common industrial spill scenarios.

TEST 1: LIQUID ABSORPTION CAPACITY TEST - ENGINE OIL (20W 50)

Objective:

Compare the absorption capabilities of Spill Soak® with the competitor's product when exposed to Engine Oil (20W 50).

TEST 1: Liquid absorption capacity test - Engine Oil (20W 50)

MATERIAL	AVERAGE ABSORBENCY BY WEIGHT (%)
Competitor Brand	490%
Spill Soak®	662%

Spill Soak®
OUTPERFORMS
COMPETITORS
35%
IN THE ENGINE
OIL TEST

Methodology:

Both products were tested with 100g of Engine Oil (20W 50), mixed until a smooth paste was formed. The same Testing Engineer conducted all tests to ensure consistency. The focus was on determining the minimal amount of each absorbent needed to fully absorb the oil. Each product was subjected to two test runs, with the average absorption rate calculated.

Calculation:

$$\text{Absorption by weight (\%)} = \frac{\text{Weight of oil used (g)}}{\text{Weight of testing material required (g)}} \times 100\%$$

TEST 2: LIQUID ABSORPTION CAPACITY TEST - WATER + 20% DETERGENT

Objective:

To evaluate and compare how Spill Soak® and the competitor's absorbent manage spills involving water and 20% detergent mixture.

TEST 2: Liquid absorption capacity test - Water + 20% detergent

MATERIAL	AVERAGE ABSORBENCY BY WEIGHT (%)
Competitor Brand	627%
Spill Soak®	675%

Spill Soak®
OUTPERFORMS
COMPETITORS
7.6%
IN THE WATER
MIXTURE TEST

Methodology:

Each absorbent is mixed with 100g of the water and detergent solution. Consistency in testing was maintained by having the same Testing Engineer conduct all tests. The key metric is the minimum absorbent quantity required to absorb the 100g mixture, with two runs for each product and an average absorption rate determined.

Calculation:

$$\text{Absorption by weight (\%)} = \frac{\text{Weight of water mixture used (g)}}{\text{Weight of testing material required (g)}} \times 100\%$$

Conclusion:

The results of the comparative tests clearly demonstrate the superior performance of Spill Soak® in relation to the competitor's absorbent. In the Engine Oil Test, the average absorbency by weight of Spill Soak® stood at 35%, surpassing the competitor's product in terms of efficiency and effectiveness. Furthermore, during the Water Test, Spill Soak® showcased its exceptional absorbency capabilities, achieving a 7.6% higher absorbency by weight compared to the competitor. These findings underscore the enhanced effectiveness of Spill Soak® in handling both oil and water-based spills, solidifying its position as a leading contender in the realm of industrial spill management.

