

QINGDAO SOCO NEW MATERIAL CO.,LTD.

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Test Report No.:TCCE181020012

Report Date: 20th OCTOBER. 2018

Test Condition:	LOCATION:
	Shibei, Qingdao, China.
	DATE:
	Oct. 2018
	CLIMATE:
	Temperature:15 $^\circ C$ 20 $^\circ C$, Humidity: 30%50%
	SOIL TYPE:
	sandy soil
	CONTAINER:
	Transparent plastic container with holes in the
	bottom.
	WATER RETAINER AGENT:
	SAP from SOCO(SHK series Potassium Polyacrylate)
Sample information	
Item	Batch no None

Physical tests done at 17℃±3℃

SC-W1-05-061

Rainfall Test Description:

Agriculture grade SAP can absorbent the water from rainfall and release when dry, if the rainfall intensity is low, or the soil water retention is big, SAP have enough time to absorbent the water, in order to know the SOCO agriculture SAP performance in worse condition, this test is to use sandy soil(Low water retention) and moderate rain quantity but with a extraordinary rainstorm intensity.



Clear Crystalline powder

Rainfall Test

Method:

Description

SOCO-Test center In-house methods:

SC-W1-05-061(GB/T9001-2008Technique)
1% SAP with sandy soil (5g SAP in 500g Soil)
10mm/min rainfall intensity for 2min.
Extraordinary rainstorm average rainfall intensity to make moderate rain total quantity.
total 300ml rainfall.

Test device:



The seepage water:

 The seepage water color of SAP mixed soil is pure and transparent, the water quantity is less due to SAP absorbing.
 The seepage water color of pure soil is yellow, the water quantity is more.

The soil:

1. The expanded SAP makes soil volume become big

2. The Pure sandy soil becomes a little bit bigger because of wet.

Result for rainfall test:

1. SAP can reduce the soil erosion from seepage.

2 SAP can absorbent the water from rainfall.

3、SHK220X can absorbent more water than SHK205X in this worse condition. (2 min rainfall)

4、 After rainfall 10min:

1# Soil: 762g (500g soil + 1g SAP + 262g water)

2# Soil: 643g (500g soil + 1g SAP + 143g water)

3# Soil: 580g (500g soil + 1g SAP + 80g water)

Soil Water Content Comparing:

1% of SHK205X in Sandy soil 1% of SHK220X in Sandy soil Pure Sandy Soil

Weight the sandy soil after rainfall testing 4 hours to find the difference.

Soil Water Content Test

Method: SOCO-Test center In-house methods:

SC-W1-05-061(GB/T9001-2008Technique) After rainfall 4 hours, making record for the weight of total soil until the pure sandy soil revert the original weight.

Analysis for rainfall test:

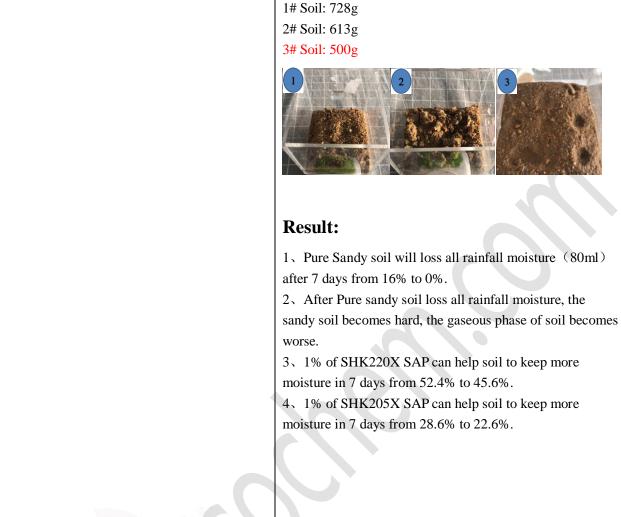
After rainfall 10min: 1# Soil: 762g 2# Soil: 643g 3# Soil: 580g





After rainfall 4hours: 1# Soil: 762g 2# Soil: 643g 3# Soil: 579g

After rainfall 7 days:



DR. Technical Manager

DR.Wang

For and on behalf of

QINGDAO SOCO NEW MATERIAL CO. LIN

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科新材料有限公司

ed Signature(s)

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