

# POLYTE<sup>®</sup> Cover Soilless Cover Material

# 1. Product Feature

POLYTE<sup>®</sup> Cover is a new type of soilless spray coating material. After spraying on the surface of the garbage, it forms a protective layer with about 5mm closed air bubbles, which can effectively control the generation of malodor, eliminate the dust problem caused by soil cover and soil erosion problems caused by rainy days.

The space resource occupied by POLYTE<sup>®</sup> Cover is only one-twentieth of the traditional soil cover method and is less costly than film cover. Thereby, the life and economic benefits of the landfill can be significantly improved.





# POLYTE<sup>®</sup> Cover leads to over 20 times space saving than traditional soil-covering



#### - The Limitation of Traditional Garbage Cover

#### By Soil

- Require large amount of storage capacity of the landfill.

- Require heavy machinery and inconvenient construction.

- High transportation cost and labor cost.
- Effect the degradation of garbage ay lower layer.

- Affect the collection of permeate and biogas due to the impervious soil layer.

- Soil erosion problems caused by rainy weather.



# By Film



- Expensive material.
- Inconvenient construction and high the labor cost.
- Difficult self- degradation cause new pollution to the environment.

- Block the water source required by the microorganisms and affect the degradation of the garbage.

- It is easy to blow up and tear in windy weather.

# 2. Principle

- POLYTE<sup>®</sup> Cover is a high-performance film-forming material for waste covering with excellent adhesion to the surface of various waste materials. A thick film layer with a thickness of about 5mm is formed after drying, which can effectively suppress the emission of odor and prevent the flying of light weight garbage such as dust and plastic bags. The cover film formed by POLYTE<sup>®</sup> Cover also has excellent water resistance. Compared with the traditional soil





cover method, it can effectively block the penetration of rainwater into the landfill layer and promote the separation of rain and sewage, thereby significantly reducing the generation of landfill leachate and reducing operating pressure of landfill leachate process; the cover film also has unique flame retardant properties and can be effective reduce the possibility of fire in the dump.

- POLYTE<sup>®</sup> Cover soilless cover material is divided into daily cover series POLYTE<sup>®</sup> Cover1000 and midterm cover series POLYTE<sup>®</sup> Cover 2000, each series consists of different materials in proportion.

- POLYTE<sup>®</sup> Cover 1000 series consists of Cover F, Cover B and Cover C in a certain ratio to meet the daily cover requirements of the landfill. Effectively prevent light weight garbage from flying, odor control, and have excellent flame resistance.

- POLYTE<sup>®</sup> Cover 2000 series consists of SD102, Cover F, Cover B and Cover C in a certain ratio and meeting the mid-term coverage requirements of the landfill. Effectively prevent light waste from flying, control odor, and have excellent flame retardancy and water resistance.

- By controlling the ratio of different materials and the thickness of the spray, it can meet the various coverage time (short-term, mid-term and long-term) requirements of the landfill: short-term coverage can be last for 1-6 weeks, and mid-term coverage can last for 3-6.

Content	By Soil	By Film	POLYTE <sup>®</sup> Cover
Landfill storage capacity waste rate	10%~20%	±0%~10%	±0%
Persistence	Vulnerable to wind and rain erosion caused loss	Long longer but very easy tear by wind	Long-lasting stability and strong adhesion
Inverted of leachate into the pipe network	Very easy to blocking	No Blocking	No Blocking
Environmental and ecological resources	Destroy ecological environment due to soil taken	The waste film is difficult to be decomposed by organism and generate new waste	Easy degradation Environmentally friendly
Garbage decomposition, Odor	Anaerobic decomposition cause serious odor	Serious odor caused the damage of film	Control the generation of odor by the utilization of deodorizing component
Operation convenient	High mechanical energy consumption, has difficulty on soil collect, transport and rain day operation	High energy consumption due to manual operation and have difficulty for daily cover operation. The film is inflammable and the gas accumulated by the film is inflammable and explosive.	Low energy consumption, operation convenient and effective, with flame retardancy
Comprehensive Cost	High	Higher	Low

# 3. Comparision of Product Advantages

Polymer Technology(H.K.) Co., Ltd. Beijing Representative Office



# 4. Product Physical And Chemical Properties

# - POLYTE® Cover F

# - Product Physicochemical Property

	Appearance	White or off-white flocculent solid	Water soluble	Insoluble in water
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	Appearance	solid	Water soluble	Insoluble in water

#### - Product Use

Dosing manner: with several other materials according to the ratio and order, spray to the waste surface through spraying equipment after uniformly mixed. Suggest to use the dedicated dosing equipment recommended by PPLYMER.

Dosage: According to different site conditions, POLYMER's engineers will recommend the best dosage.

Note: Fully stirred after dosing.

## - Package, Transportation, storage and Quality Assurance

- 10kg/ original sealing bag.

- Packaging and Loading must be secured during transportation.

Ensure the container does not leak, collapse, fall, and damaged during transportation.

It is strictly forbidden to mix transportation with oxidants, reducing Chemicals, alkalis, food chemicals, etc.

It should be protected from exposure, rain and high temperature during transportation.

The vehicle should be thoroughly cleaned after transportation.

- Store in a cool, ventilate warehouse.

Keep away from fire and heat.

It should be stored separately from oxidants, reducing Chemicals and alkalis.

- One years expire date.

Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.

# - POLYTE<sup>®</sup> Cover B

#### - Product Physicochemical Property

Appearance	Yellow Powder	Density (H <sub>2</sub> O=1)	2.10~2.60
pH (5% suspension in water)	8~10	Water soluble	Insoluble in water

### - Product Use

Dosing manner: work with other materials in certain ratio and order, spray to the waste surface through spraying equipment after uniformly mixed. Suggest to use the dedicated dosing equipment recommended by POLYMER.



Dosage: According to different site conditions, engineers of POLYMER will recommend the best dosage.

Note: Fully stirred after dosing.

# - Package, Transportation, storage and Quality Assurance

- 25kg/ original sealing bag.

- Packaging and Loading must be secured during transportation.

Ensure the container does not leak, collapse, fall, and damaged during transportation.

It is strictly forbidden to mix transportation with oxidants, reducing Chemicals, alkalis, food chemicals, etc.

It should be protected from exposure, rain and high temperature during transportation.

The vehicle should be thoroughly cleaned after transportation.

- Store in a cool, ventilate warehouse.

Keep away from fire and heat.

It should be stored separately from oxidants, reducing Chemicals and alkalis.

- One years expire date.

Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.

## - POLYTE® Cover C

## - Product Physicochemical Property

Appearance	Gray Powder	Density (H <sub>2</sub> O=1)	2.90~3.15
pH (aqueous solution)	12~13	Water soluble	Slightly soluble (0.1~1.0%)

#### - Product Use

Dosing manner: with several other materials according to the ratio and order, spray to the waste surface through spraying equipment after uniformly mixed. Suggest to use the dedicated dosing equipment recommended by POLYMER.

Dosage: According to different site conditions, POLYMER's engineers will recommend the best dosage.

Note: Light burns to the skin may be caused by wet products, pay attention to protection, and clean the skin after use.

## - Package, Transportation, storage and Quality Assurance

- 25kg/ original sealing bag.
- Packaging and Loading must be secured during transportation.

Ensure the container does not leak, collapse, fall, and damaged during transportation.

It is strictly forbidden to mix transportation with oxidants, reducing Chemicals, alkalis, food chemicals, etc.



During transportation, it should be protected from exposure, rain and high temperature.

The vehicle should be thoroughly cleaned after transportation.

- Store in a cool, ventilate warehouse.

Keep away from fire and heat.

It should be stored separately from oxidants, reducing Chemicals and alkalis.

- One years expire date.

Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.

#### POLYTE® SD102

#### - Product Physicochemical Property

Appearance	Ivory Liquid	Density (H <sub>2</sub> O=1)	1.04~1.10
рН	5.5~6.5	Water soluble	Miscible

## - Product Use

Dosing manner: with several other materials according to the ratio and order, spray to the waste surface through spraying equipment after uniformly mixed. Suggest to use the dedicated dosing equipment recommended by POLYMER.

Dosage: According to different site conditions, POLYMER's engineers will recommend the best dosage.

Note: Stable at ambient temperature. Solidification may occur after freezing, thawing or boiling.

#### - Package, Transportation, storage and Quality Assurance

#### - 25Kg/ Barrel.

- Packaging and Loading must be secured during transportation. Ensure the container does not leak, collapse, fall, and damaged during transportation. It is strictly forbidden to mix transportation with oxidants, reducing Chemicals, alkalis, food chemicals, etc. During transportation, it should be protected from exposure, rain and high temperature. The vehicle should be thoroughly cleaned after transportation.

- Store in a cool, ventilate warehouse. Keep away from fire and heat. It should be stored separately from oxidants, reducing Chemicals and alkalis.

- Two years expire date. Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.