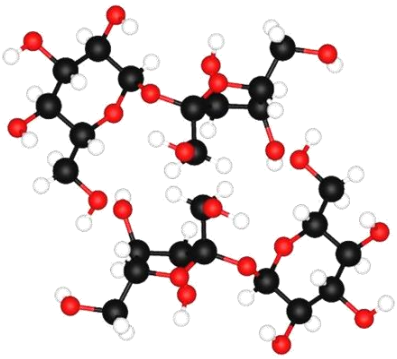
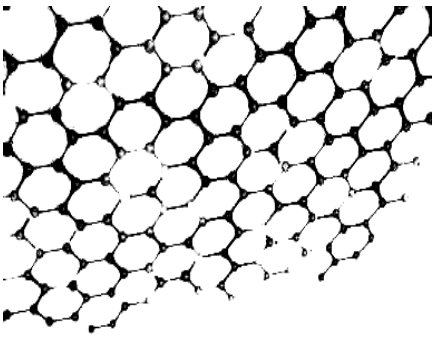
# POLYTE® SD100 Series Dust Control Agent for Storage Sites

## 1. Introduction of the POLYTE® SD100 Series Dust Control Agent for Storage Sites

POLYTE® SD100 Series Dust Control Agent for Storage Sites is an environment-friendly dust depressant. It is the polymerization of a new polymer and a multifunctional reactive ion group. It can be quickly penetrated and captured and adsorbs particulate dust after being sprayed on the surface of stored dust and forms a solid, tough and long-lasting solidified layer on the surface to prevent methane dust damage and loss. At the same time, the curing layer of the formed film can effectively prevent the air, moisture and the dregs from coming into contact with each other, thereby functioning as proof of dust and pollution due to sludge flow after rain.

## 2. Principle of POLYTE® SD100 Series Dust Control Agent for Storage Sites





Rapid penetration, capture and adsorption of active ion groups → Net structure after loss of water → Dense and tenacity of net structure

## 3. Introduction of POLYTE® SD102 Dust Control Agent for Storage Sites

**- Product Performance**

POLYTE® SD102 Dust Control Agent for Storage Sites is an environment-friendly dust depressant. It is the polymerization of a new polymer and a multifunctional reactive ion group. It can be quickly penetrated and captured and adsorbs particulate dust after being sprayed on the surface of stored dust and forms a solid, tough and long-lasting solidified layer on the surface to prevent methane dust damage and loss. At the same time, the curing layer of the formed film can effectively prevent the air, moisture and the dregs from coming into contact with each other, thereby functioning as proof of dust and pollution due to sludge flow after rain.

**- Product Characteristics**

- Great compatibility and adhesion: It is easy to compatible with muck, coal ash, raw material dust, etc. and

bonds the dust particles and surface particles together to form a complete coverage without leaks.

- High safety: It is non-toxic, degradable and does not affect the growth of vegetation. Non-corrosive, will not cause corrosion damage to construction equipment, concrete frames, etc. The physical properties of the covered material are not affected after use.

- Good stability: The temperature resistance range is from -30~90, resistant to UV rays and corrosion.

**- Physics Characteristics**

POLYTE® SD102 Dust Control Agent for Storage Sites

| Index | Tech Parameter | Note |
|---|---|---|
| Appearance | Ivory-white Liquid | ------ |
| PH Value | 6.5~7.5 | Dilute 200 Times |
| Dissolution Utilization Ratio | 5~20% | |
| Solubility | Dissolve in water | ------ |

**- Use Method**

- Large area dust suppression: the professional dust depressant sprayer vehicle, Trailer spray device or fixed spray device can evenly spray the bonding dust control agent on the surface of the slag and floating ash material with the effective range 20~80 meters.

- Small area dust accumulation site dust suppression: simple push-type sprayer and stretcher sprayer can be used. Note: Please consult the POLYMER's engineer for the specific dosage ratio.

Note: Please consult POLYMER's engineers for the specific dosage ratio.

**- Storage Safety and Packaging**

25kg, 1T/ barrel, placed in a cool place and at room temperature, the shelf life is one year.

# POLYTE® SD200 Series Dust Control Agent for Urban Roads

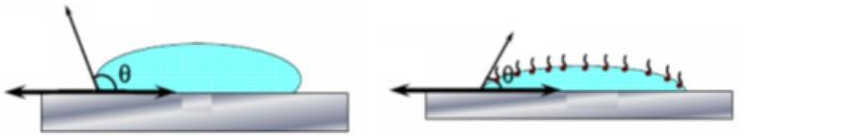
## 1. Introduction of POLYTE® SD200 Series Dust Control Agent for Urban Roads

POLYTE® SD200 Series Dust Control Agent for Urban Roads is a new green Polymer material with a variety of ionic groups. The ionic groups in each molecule have strong compatibility and have a certain adhesion to dust particles which Make it difficult to move in the atmosphere again, also the dust depressant also has strong water absorption and water retention characteristics, thereby preventing road dust.

## 2. Principle of POLYTE® SD200 Series Dust Control Agent for Urban Roads

### - Wetting Function

The surfactant in the product consists of a hydrophilic and hydrophobic group. When dissolved in water, its molecules are completely surrounded by water molecules, one end of the hydrophilic group is attracted by water molecules, and one end of the hydrophobic group is repelled and extended into the air, so that the molecules form a tight alignment layer (interface adsorption layer) on the surface of the aqueous solution, so that the surface molecules of water change with the contact state of the air, and the contact area is greatly reduced, resulting in a decrease in the surface tension of the water. At the same time, there is an adsorption between the hydrophobic base and the dust toward the air, and the dust particles are brought into the water, so that the dust is sufficiently wetted.

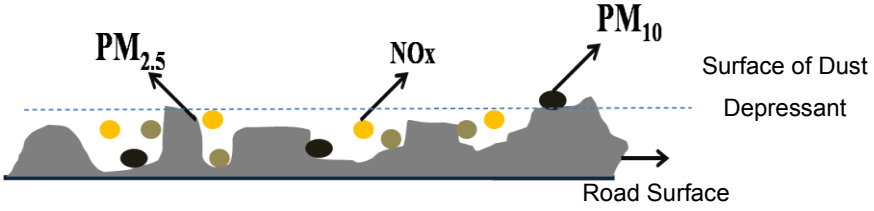



No surfactants, no wetting function  Obtain wetting function through surfactants

**Schematic Diagram**

### - Adsorption Function

The wetted adsorbent not only can adsorb PM10 and PM2.5 in the pavement environment, but also can adsorb the nitrogen oxides in the automobile exhaust gas, so that it is no longer active in the road environment and improved the air quality of the pavement environment greatly.




**Schematic Diagram**

### - Moisturizing Function

The humectant in the product has strong water absorption and water retention, and the water evaporation

is slowed down after watering. When the weather is dry, the moisture can be absorbed from the air to keep the road surface wet for a long time, thereby reducing the frequency of watering.

## 3. Introduction of POLYTE® SD205 Series Dust Control Agent for Urban Roads

**- Product Performance**

POLYTE® RD205 municipal road dust depressant is a green dedicated new polymer material, contains a variety of ionic groups. The ionic groups in each molecule have strong compatibility and have a certain adhesion to dust particles which Make it difficult to move in the atmosphere again, also the dust depressant also has strong water absorption and water retention characteristics, thereby preventing road dust.

### - Product Characteristics

- Great compatibility and adhesion: Easy to bond with dust particles and fast dust reduction.

- Good moisture retention: Reduce sprinkling frequency and save water from waste.

- Good resistance to freezing and thawing and wind erosion.

- High safety: The material of the product is safe, can be naturally degraded, does not affect the growth of the plant, and the surface is wet but not slippery after spraying. No corrosion to vehicles and road bridges, no impact on driving safety.

**- Physics Characteristics**

POLYTE® SD205 Series Dust Control Agent for Urban Roads

| Index | Tech Parameter | Note |
|---|---|---|
| Appearance | White solid | ------ |
| Active ingredients | ≥99% | |
| pH Value | 6~8 | Dilute 200 Times |
| Dissolution Utilization Ratio | 3~5% | |
| Solubility | Dissolve in water | ------ |

**- Use Method**

- The medicament is formulated in a sprinkler according to a dissolution ratio of 3%~5% and sprayed by a sprinkler vehicle.

- The spraying frequency is generally 2~4 times / month, and sprinkled normally during the interval (the amount and frequency of sprinkling can be appropriately reduced).

Note: Please consult POLYMER's engineers for the specific dosage ratio.

**- Storage Safety and Packaging**

25kg / bag, placed in a dry, cool place, protected from moisture and sunscreen, one-year shelf life.