

# POLYTE<sup>®</sup> 4080A High Efficiency Desulfurization Synergist

## 1. Product Introduction

POLYTE<sup>®</sup> 4080A is a compound desulfurization synergist formulated with buffer, activator, dispersant, etc. It can effectively enhance the gas-liquid mass transfer efficiency, enhance the absorption process of sulfur dioxide in the flue gas, and accelerate the dissolution of the absorbent. The catalytic reaction proceeds in the forward direction and improve desulfurization efficiency greatly. Due to the significant improvement of efficiency, one or two slurry circulation pumps can be shut down by compared to the previous year, which has obvious energy saving and consumption reduction effects.

## 2. Product Charateristic

Appearance	White crystalline uniform	Density(25)	1.300±0.05 g/cm <sup>3</sup>
Effective content	> 99.5%	Water soluble	Soluble

### 3. Product Use

- Dosing Point: Synergist can be dosing at any point in the slurry circulation. We recommended dosing at the pit of the desulfurization tower then pumped into the absorption tower through the pit pump after stirring.

- Dosage: Depending on the Wet-FGD system and operating conditions, optimum dosage recommendation will be provided by POLYMER's engineer.

- Note: pit agitator remain open while dosing products into the desulfurization tower through desulfurization tower lift pump of the pit to ensure uniform dissolution and diffusion of the synergist to provide the best reaction environment for fully absorb of SO<sub>2</sub>.

### 4. Package, Storage and Transportation

- 40kg/ original seal barrel.

- Packaging and the loading should be secured when shipping. Containers keep away from leak, collapse, fall, and damaged during transportation. Mix and transport with oxidants, reducing agents, alkalis, food chemicals, etc. is strictly forbidden. Product should be protected from exposure, rain and high temperature during transportation. The vehicle should be thoroughly cleaned after transportation.

- Store in a cool and ventilated warehouse. Keep away from fire and heat. It should be stored separately from oxidants, reducing agents and alkalis to avoid mixing.

- Expire date: 3 years. Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.



# **POLYTE® Pro505 Desulfurization Synergist**

### 1. Product Feture

- Effectively improve the mass transfer efficiency of the absorption medium during the desulfurization reaction, reduce the operating energy consumption of some slurry circulation pumps, also effectively stabilize or reduce the liquid-gas ratio (number of mass transfer units) of the desulfurization system, and enhance the long-term safety and stable economic operation of the desulfurization system.

- Effectively slow down the operation difficulty of the desulfurization system due to the high sulfur content of the coal entering the plant, operation unstable and unbalance absorption reaction of the slurry for better meeting the environmental protection requirements.

- Convenient dosing operation, easy for measuring, effectively improves the desulfurization efficiency without transformation of existing desulfurization equipment.

### 2. Product Charateristic

Appearance	White crystalline uniform	Density (25)	1.30±0.05g/cm <sup>3</sup>
Effective content	> 99.0%	Water soluble	Soluble

### 3. Product Use

- Dosing Point: Synergist can be dosing at any point in the slurry circulation. We recommended dosing at the pit of the desulfurization tower then pumped into the absorption tower through the pit pump after stirring.

- Dosage: Depending on the Wet-FGD system and operating conditions, optimum dosage recommendation will be provided by POLYMER's engineer.

- Note: pit agitator remain open while dosing products into the desulfurization tower through desulfurization tower lift pump of the pit to ensure uniform dissolution and diffusion of the synergist to provide the best reaction environment for fully absorb of SO<sub>2</sub>.

### 4. Package, Storage and Transportation

- 25kg/ original seal bag.

- Packaging and the loading should be secured when shipping. Containers keep away from leak, collapse, fall, and damaged during transportation. Mix and transport with oxidants, reducing agents, alkalis, food chemicals, etc. is strictly forbidden. Product should be protected from exposure, rain and high temperature during transportation. The vehicle should be thoroughly cleaned after transportation.

- Store in a cool and ventilated warehouse. Keep away from fire and heat. It should be stored separately from oxidants, reducing agents and alkalis to avoid mixing.

- Expire date: 3 years. Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.



# POLYTE<sup>®</sup> 503 Desulfurization Synergist

### 1. Product Feature

- Effectively improve the gas-liquid mass transfer efficiency of SO2 during the desulfurization reaction to strengthen the absorption of SO2; reduce the operating energy consumption of some slurry circulation pumps, and effectively stabilize or reduce the liquid-gas ratio (mass transfer unit number) of the desulfurization system to desulfurization to ensure system safely and stably for a long time.

- The salt formed by synergist is embedded in the gypsum or calcium sulphite lattice to make the crystal unstable and distorted, so that the scale layer becomes thin and sparse, and the components in the synergist can reduce the surface tension and lower the critical nucleus. The radius causes the CaSO3 and CaSO4 appearing in the slurry to be in an unsaturated state and thus acts as a scale inhibition effect.

#### 2. Product Charateristic

Appearance	Light yellow green to yellowish brown solid	Density (25)	1.1±0.05g/cm <sup>3</sup>
Effective content (%)	> 99.0%	Water soluble	Slightly soluble

### 3. Product Use

- Dosing Point: Synergist can be dosing at any point in the slurry circulation. We recommended dosing at the pit of the desulfurization tower then pumped into the absorption tower through the pit pump after stirring.

- Dosage: Depending on the Wet-FGD system and operating conditions, optimum dosage recommendation will be provided by POLYMER's engineer.

- Note: pit agitator remain open while dosing products into the desulfurization tower through desulfurization tower lift pump of the pit to ensure uniform dissolution and diffusion of the synergist to provide the best reaction environment for fully absorb of SO<sub>2</sub>.

### 4. Package, Storage and Transportation

- 25kg/ original seal bag.

- Packaging and the loading should be secured when shipping. Containers keep away from leak, collapse, fall, and damaged during transportation. Mix and transport with oxidants, reducing agents, alkalis, food chemicals, etc. is strictly forbidden. Product should be protected from exposure, rain and high temperature during transportation. The vehicle should be thoroughly cleaned after transportation.

- Store in a cool and ventilated warehouse. Keep away from fire and heat. It should be stored separately from oxidants, reducing agents and alkalis to avoid mixing.

- Expire date: 3 years. Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.

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



# **POLYTE<sup>®</sup> 502** Desulfurization Synergist

## 1. Product Feature

- Product is compounded with a variety of organic acids, which can greatly increase the reactivity of limestone without being affected by impurities in limestone.

- Product has the characteristics of small dosage, simple dosing and so on.

- Significantly increase the sulfur content of coal and relieve the operating pressure of the desulfurization system.

# 2. Product Charateristic

Appearance	Light yellow green to yellowish brown solid	Density (25)	1.1±0.05g/cm <sup>3</sup>
Effective content (%)	> 95.0%	Water soluble	Slightly soluble

## 3. Product Use

- Dosing Point: Synergist can be dosing at any point in the slurry circulation. We recommended dosing at the pit of the desulfurization tower then pumped into the absorption tower through the pit pump after stirring.

- Dosage: Depending on the Wet-FGD system and operating conditions, optimum dosage recommendation will be provided by POLYMER's engineer.

- Note: pit agitator remain open while dosing products into the desulfurization tower through desulfurization tower lift pump of the pit to ensure uniform dissolution and diffusion of the synergist to provide the best reaction environment for fully absorb of SO2.

# 4. Package, Storage and Transportation

- 25kg/ original seal bag.

- Packaging and the loading should be secured when shipping. Containers keep away from leak, collapse, fall, and damaged during transportation. Mix and transport with oxidants, reducing agents, alkalis, food chemicals, etc. is strictly forbidden. Product should be protected from exposure, rain and high temperature during transportation. The vehicle should be thoroughly cleaned after transportation.

- Store in a cool and ventilated warehouse. Keep away from fire and heat. It should be stored separately from oxidants, reducing agents and alkalis to avoid mixing.

- Expire date: 3 years. Please refer to MSDS (Material Safety Data Sheet) or COA (Certificate of Authenticity) for this product.