



**昌盛复合材料**

Changsheng composite material

20 Years Of Experience In PVC Stabilizers And Additives



# PRODUCT CATALOG

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For more information, please visit our website:  
[www.changshengmaterial.com](http://www.changshengmaterial.com)

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## WEIFANG CHANGSHENG COMPOSITE MATERIAL CO., LTD 潍坊昌盛复合材料有限公司



Weifang Changsheng Composite Material Co., Ltd.(For short: Changsheng Material)was founded in 2002, located in "Shandong Qilu" -a major industrial province in China, mainly engaged in the research and manufacture of PVC stabilizers and PVC additives.

The main products include Methyl Tin Mercaptide Stabilizer, Ca/Zn Stabilizer, Antimony Mercaptide Stabilizer, Phenyl Diisooctyl Phosphite(PDOP), ESBO, and other auxiliary processing additives like Optical Brightening, PVC Deodorant, UV Absorbers, etc. Our products are widely used in the production of chemical and building materials, agricultural PVC plastic products, industrial PVC plastic products, packaging materials, etc.



Among them, the advanced methyl tin mercaptide stabilizer production line was built in 2003. After years of development, the current annual output exceeds 10000 tons. It is widely used in the processing of PVC sheets, plates, pipes, blow molding, and injection molding products. It occupies a significant market in China and is exported to Southeast Asia, Europe, South America, North America, Africa, and other countries and regions.

In the future, we will continue to provide more customers with economic and reliable products and professional services. Let's keep innovating and prospering (Changsheng) together.

# METHYL TIN MERCAPTIDE

## INTRODUCTION

Methyl tin mercaptide is one of the tin stabilizers and is the most popular and most used one. It has excellent heat stability and can be applied to the process of PVC extrusion, calendering, blow molding and injection molding.

### Methyl Tin Mercaptide CS-181

The standard 19% tin-content methyl tin stabilizer. It is equivalent to AMERICAN TM-181-FS. Suitable for all kinds of demanding PVC industries.

ITEM	SPECIFICATIONS
CAS	57583-35-4
Structural Formula	C <sub>22</sub> H <sub>44</sub> O <sub>4</sub> S <sub>2</sub> Sn
Appearance	Transparent liquid
Color (Pt-Co value)	≤50
Tin Content %	19±0.5
Specific Gravity (25°C, g/cm <sup>3</sup> )	1.16±0.03
Viscosity (25°C, mPa·S)	30-90

## PACKAGE

Packed into the plastic drum, 220kg/drum, packed into the IBC tank, 1100 or 1200kg /IBC, or other customized packages.

## STORAGE AND TRANSPORT

The product is non-flammable, non-toxic, and non-explosive. Please keep it in a cool and dry place with the cover facing up to prevent water.

Product shelf life 12 months.

## APPLICATIONS

- PVC film (thermal shrinking packaging film, printing film, calendared film, twisting film, etc.)
- PVC sheet (clear flexible and rigid sheet, Christmas sheet, advertisement sheet, compound sheet, etc.)
- PVC building and construction materials (water pipe and pipe fittings, chemical pipes, construction materials, profile, etc.)
- PVC granule(hose, packing material, the shell of electronic communication apparatus, etc.)





## Composite Tin Stabilizer CST-181

Special stabilizer for PVC film, suitable for all kinds of PVC shrink film, printing film, packaging film, and high standard PVC sheet material, etc.

It is compounded by tin stabilizer and antimony stabilizer, which greatly reduces the production cost of customers.

ITEM	SPECIFICATIONS
Appearance	Light yellow transparent liquid
Colour (Pt-Co value)	$\leq 100$
Metal Content (%)	$18.5 \pm 0.5$
Sulfur Content (%)	10.5-11.5
Specific Gravity (25°C, g/cm <sup>3</sup> )	$1.15 \pm 0.05$
Viscosity (25°C, mPa·S)	20-80

### PACKAGE

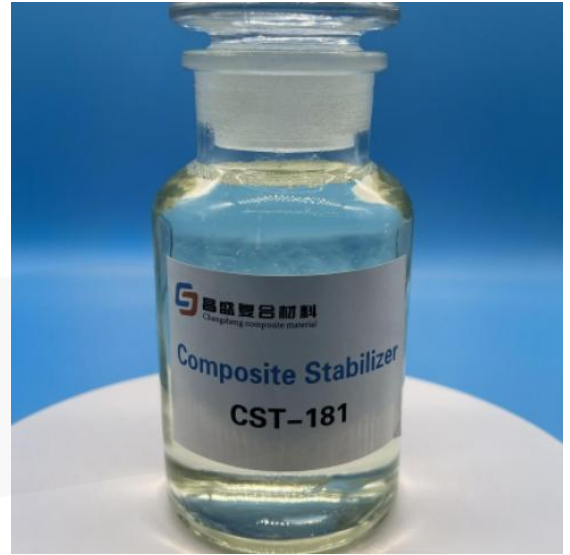
NW:220kg Plastic drum

NW:1100kg IBC tank

Other customized packages

### STORAGE AND TRANSPORT

CST-181 is non-hazardous, please store it in a dry environment, do not expose it to the sun, sealed shelf life of one year.



## 16% Tin Methyl Tin Stabilizer CS-181F

- Stability close to that of methyl tin stabilizer CS-181
- Excellent Transparency
- Good Compatibility And Liquidity
- Environmental protection non-toxic
- Lower costs



## 12% Tin Methyl Tin Stabilizer CS-181B

Highly efficient, excellent color stability, highest output, for any rigid Vinyl extrusion application.

Users can choose PVC stabilizers with different tin content according to their actual needs. We provide free sample testing, and users can experiment according to their own production formula.

# CA-ZN STABILIZER

## INTRODUCTION

Calcium and zinc stabilizer is composited by calcium salt, zinc salt, lubricating agent, antioxidant, and other significant components. It can not only replace lead and cadmium stabilizers and organic tin stabilizers but also has good heat stability, light stability, transparency, and coloring power.

## FEATURES AND PERFORMANCE

- Excellent dispersion, compatibility, and processing fluidity in processing with PVC resin.
- Excellent surface finish of products; excellent thermal stability, small initial color phase, no precipitation phenomenon.
- No heavy metals and other toxic components, no sulfide phenomenon.
- Long Congo red test time, excellent electrical insulation, no impurities.
- Highly efficient weather resistance, and better whiteness than its counterparts in white products.

## PACKAGE AND STORAGE

20KG or 25KG Per Paper Plastic Bag

Please store in a cool, ventilated, and dry place with a shelf life of 18 months.





## PRODUCT GRADE

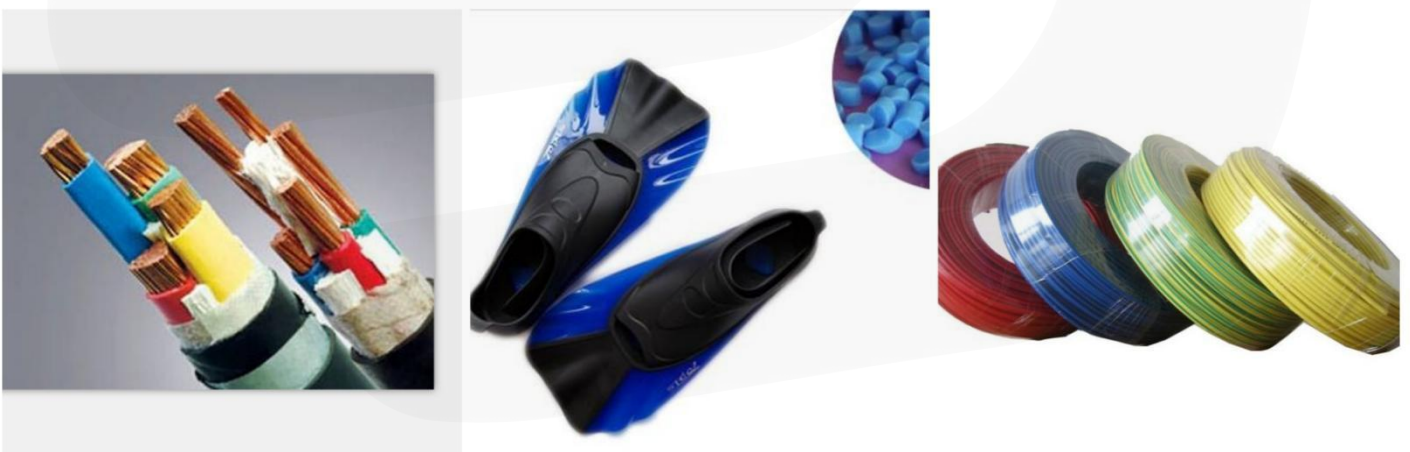
MODEL	APPEARANCE	APPLICATION
CS-6801	White powder	It can be used for transparent products, such as PVC granules, PVC hoses, PVC sheets, crystal shoes and other soft products.
CS-6802	White powder	Stability is lower than 6801, It can be used for transparent products, such as PVC granules, PVC hoses, PVC sheets, crystal shoes and other soft products.

CS-6801/6802 suitable for highly transparent PVC flexible products.



MODEL	APPEARANCE	APPLICATION
CS-6805	White powder	White products special, mainly used for 60-105 °C wire and cable, hose, PVC water shoes, toys, etc.
CS-6812	White powder	For dark colored products such as wires, cables, hoses, granules, etc.

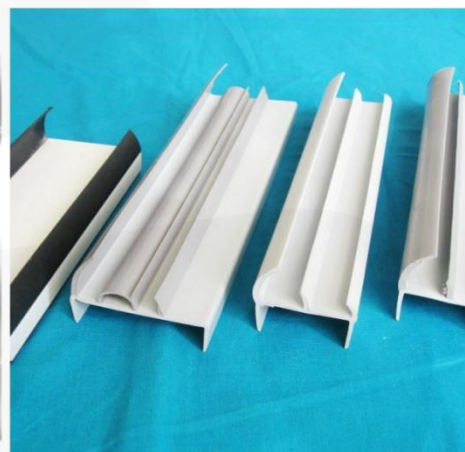
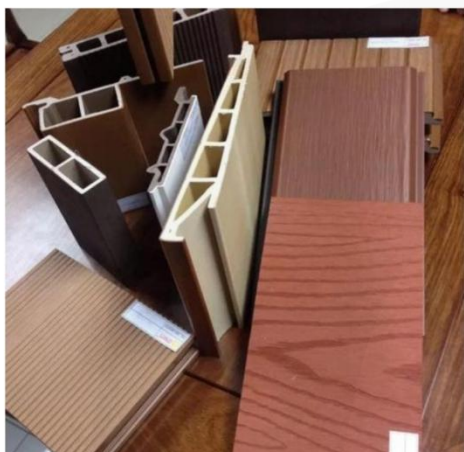
CS-6805/6812 mainly used for 60°C -105°C wire and cable, also can be used for hose, floor mats, toys, etc. CS-6805 used for white PVC products and 6812 for dark PVC products.



MODEL	APPEARANCE	APPLICATION
CS-6901	White powder	For rigid water pipes, wire channels.
CS-6902	White powder	PVC pipe fittings for special use.
CS-69XX	White powder	PVC profile,PVC floor,sheet,etc.

CS-6901/6812 mainly used for rigid PVC products like PVC pipe, PVC wire ducts, PVC fittings, etc.

CS-69XX Series mainly used for PVC profiles, all calcium and zinc stabilizers can be customized according to customer requirements, provide free sample testing.



## ANTIMONY MERCAPTIDE

### INTRODUCTION

Antimony mercaptide stabilizer, also known as organic antimony stabilizer, is a new type of PVC heat stabilizer, with good initial coloring and processing stability, its heat stability is comparable to the tin stabilizer and better than calcium-zinc stabilizer, is non-toxic and environmentally friendly, its price is much cheaper than methyl tin stabilizer.

#### Antimony Mercaptide CST-A

CST-A is Changsheng's best antimony stabilizer, suitable for the production of packaging films, high-end PVC sheet materials.

*Note: This product is afraid of sunlight exposure.*

#### PACKAGE

NW:220kg Plastic drum

NW:1100kg IBC tank

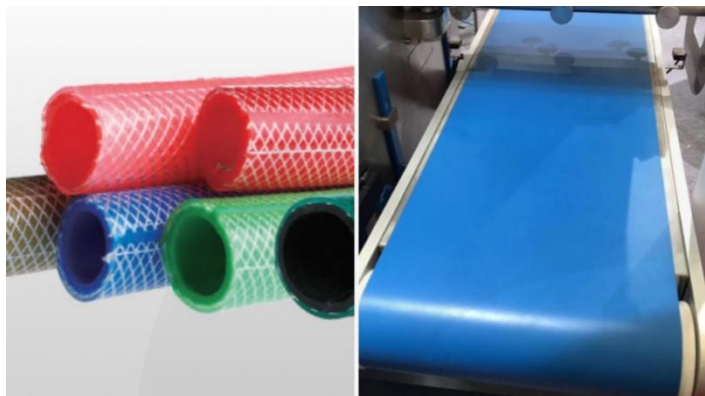
Other customized packages

ITEM	SPECIFICATIONS
Appearance	Light yellow transparent liquid
Colour (Pt-Co value)	≤100
Antimony Content (%)	19±0.5
Sulfur Content (%)	10.5-11.5
Specific Gravity (25°C, g/cm <sup>3</sup> )	1.16±0.05
Viscosity (25°C, mPa·S)	20-80



## Antimony Mercaptide CST-B

Suitable for single and twin screw extruder production process can produce plastic gloves, rigid water pipe, cable, non-transparent soft pipe, etc.



## Antimony Mercaptide CST-D

Although CST-D is the cheapest antimony stabilizer, its stabilizer is still good and can be used for plastic extrusion and calendering, especially for PVC hoses, PVC conveyor belts, etc.

# AUXILIARY STABILIZER

## Phenyl Diisooctyl Phosphite (PDOP)

### INTRODUCTION

Phenyldiisooctyl phosphite (PDOP) can be used as Antioxidants for PVC plastic. It has a good synergistic effect with many phenolic antioxidants.

It is widely used in various polyvinyl chloride (PVC) products to maintain transparency and inhibit color changes. At the same time, it can increase the oxidation resistance and light and heat stability of the main stabilizer.

### APPLICATIONS

Phenyldiisooctyl phosphite (PDOP) is a chelating agent and stabilizer in PVC and synthetic resin products. In addition to its good color inhibition, this product can also increase antioxidant properties and light stability.

### PACKAGE

180KG Net Weight Galvanized Iron Drum or Plastic Drum  
900KG Standard IBC Tank

### STORAGE AND TRANSPORT

It is stored and transported as non-dangerous goods. Store and transport in a ventilated, dry place, moisture-proof, moisture-proof, and sun-proof. During transportation, load and unload lightly to prevent violent impact and cause leakage.

ITEM	SPECIFICATIONS
Appearance	Colorless and transparent liquid
Colour (Pt-Co value)	≤50
Acid Value(mgKOH/g)	≤0.10
Relative Density (25°C,g/cm <sup>3</sup> )	0.945~0.955
Refractive Index	1.475~1.480

## Epoxidized Soya Bean Oil ESBO/ESO

### INTRODUCTION

ESO/ESBO has excellent heat resistance, light resistance, and compatibility. Commonly used as a plasticizer for PVC products, especially suitable for transparent PVC products, food packaging products, and other non-toxic products.

ITEM	SPECIFICATIONS
CAS No.	8013-07-8
Color Shade, (Pt- Co ) max	60-70
Density ( 20°C) g /cm <sup>3</sup>	0.988~0.998
Acidity, mg KOH/g max	0.4
Flashing Point °C min	>280
Loss upon Heat % max	0.30
Iodine Value % max	3.0
Epoxy Value, % min	>6.2



### PACKAGE

200kg Iron Drum or as customer's request

## PVC ADDITIVES

CHANGSHENG do not produce additives, but for the convenience of customers, we represent some of additives types for PVC applications that we are very familiar with, and we have professional technical staff engaged in PVC additives production development and quality control.

### PVC UV-Absorber CS-UV

#### INTRODUCTION

UV stabilizer CS-UV is an excellent performance of light stabilizer and can absorb 240-340 nm UV radiation.

#### FUNCTION

- UV stabilizers in plastics provide maximum protection to polymers and help reduce color.
- UV stabilizers in plastics also retard the yellowing of plastics and prevent the loss of their physical function.

#### PACKAGE

25kg/drum or 50kg/drum, packed in cardboard drums lined with plastic bags  
10 kg/carton,10 bags, 1kg per bag

### Deodorant For PVC CSD-609

#### INTRODUCTION

CSD-609 is a special PVC deodorizer for PVC plastics..

#### FUNCTION

- PVC Deodorant can quickly penetrate the surface of raw materials, absorb and neutralize the odor of monomers in raw materials, and react and decompose to eliminate the odor.

#### PACKAGE

10 kg/carton,10 bags, 1kg per bag

## PVC Optical Brightening

### INTRODUCTION

CS-OB-1 and CS-FP-127 it is especially suitable for whitening plastic products molded at high temperatures.

### FUNCTION

Improve the whiteness and brightness of PVC products.

### PACKAGE

20KG or 25KG in paper drums

### APPLICATION

All of them can be used for PVC soft and rigid products that require whiteness.

CS-OB-1 and CS-FP-127 price is close, the effect is close, and the customer can choose according to the actual situation and formula requirements.

We recommend choosing CS-FP-127 for the high whiteness requirement and CS-OB-1 for the high weather resistance requirement.



### APPLICATION

Changsheng's DOS/DOA can give PVC products good low-temperature softness and light resistance and better hand feel.

Mostly used with DOP, DBP main plasticizers for cold-resistant agricultural films, frozen food packaging films, wire and cable cladding, plates, outdoor water pipes, hoses, etc.

DOS is much more expensive and more resistant to cold than DOA

### PACKAGE

200kg net weight iron drums or plastic drums, 1000KG IBC tank

## Cold-Resistant Plasticizers DOS/DOA

### INTRODUCTION

This product is used with the main plasticizer DOP/DBP to provide a cold-proof effect.

### FEATURE

- High plasticizing efficiency
- Low volatility
- Excellent cold resistance type
- Color does not change easily with heat progress





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