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# **Corrosion and Scale Inhibitor**

MSTN CI-22 Industrial Circulating Water Treatment Agent



### ➤ Product Features

- ▶ Low corrosion rate
- ▶ Strong scale inhibition
- ▶ Good stability
- ▶ Green environmental protection of products, no pollution to the environment;







### ➤ Product Attributes

Name	Corrosion and Scale Inhibitor	Brand	MSTN
Mode	MSTN CI-22	Packing Specification	25kg/Bucket
Aspect	light yellow transparent liquid	Customization of processing	Yes
Density 20g/cm3	1.10±0.05	Use	Industrial Circulating Water Treatment
solid content	≥22%		
pH Valve(1%)	3.0±1.5	Application Fields	Power generation, steel, chemical, petro- leum, coking, central air conditioning, etc
Main Ingredient	Organic Polymer	Application Fields	
Origin	Hebei		

### > Instructions for Usage

- ▶ Usually the content of the agent in the system should be 20-40mg/L, but when the system cycle is abnormal and the amount of sewage discharged is large, the amount of the agent can be increased, and the most suitable amount should be determined by the local water quality.
- ▶ It can be added directly or after dilution in the medicine cylinder. Automatic dosing requires a timer and metering pump. It is recommended to use stainless steel or PVC equipment during dosing.

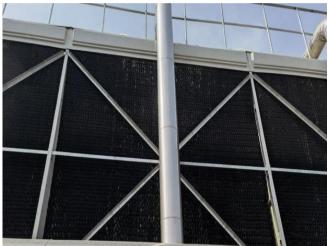
# > Packing, storage and precautions

- ▶ The corrosion and scale inhibitor is packed in plastic drum, 25kg per barrel. Stored in a cool indoor place, storage period of 12 months.
- ▶ Corrosion and scale inhibitor is weakly acidic. Pay attention to labor protection during operation, avoid contact with skin and eyes, and rinse with plenty of water after contact.

# > Case Study Sharing

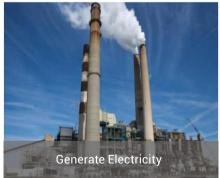
A central air conditioning project, circulating water 1000m3, system operation from May to September.





# > Application Fields













▶ The above pictures are quoted from the network, if there is infringement, please contact to delete.

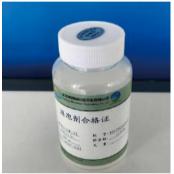
# **Defoamer**

# MSTN-DF-22 Industrial Water Treatment Agent



#### > Product Features

- ▶ Fast defoaming speed
- ▶ Long bubble suppression time
- ▶ Less consumption, low cost
- ▶ Green Environmental Protection of Products. no pollution to the environment
- ▶ Wide Range Of Application





#### > Product Attributes

Name	Defoamer	Main Ingredient	Polyepoxy Silane
Mode	MSTN-DF-22	Use	Industrial Water Treatment
Aspect	Milky white/transparent	Brand	MSTN
Effective Constituent	≥50% (customizable)	Packing Speci- fication	25kg/Bucket
рН	6.0-8.0	<ul> <li>Sewage Treatment;</li> <li>Textiles;</li> <li>Water Based Coating</li> <li>Industrial Cleaning;</li> <li>Paper Making;</li> <li>Building Materials;</li> </ul>	Circulating Water Treatment;
Viscosity (25°)	300-800mPa.s		▶ Textiles;
Water Solubility	Dissolve In Water		▶ Industrial Cleaning;
Origin	Hebei		▶ Building Materials;
Customization of processing	Yes		▶ Daily Chemical And Other Industries

# ➤ Instructions for Usage

▶ MSTN-DF-22 Defoaming Agent was added to the foaming system to ensure uniform dispersion. If diluted, the diluent should not be stored for more than 24 hours. The Defoamer has excellent antifoaming and antifoaming performance, which can be added after the foam is generated or added to the product as an antifoaming component. According to the different usage systems, the addition amount of antifoaming agent can be 10~1000ppm, and the optimal addition amount is determined by the customer according to the specific situation of the test.

# > Packing, storage and precautions

- ▶ The product is packed in 25kg plastic drum. This product should be stored in a ventilated, cool and dry environment.
- ▶ From the date of production, the storage period is 12 months. This product is stored and transported as non-dangerous goods.

# > Field of application

▶ Circulating water treatment; Sewage treatment; Textiles; Water based coating; Industrial cleaning; Paper making; Building materials; Daily chemical and other industries.

# **Flocculant**

# MSTN WY-01 industrial sewage treatment agent

### ➤ Product Features

- ▶ High efficiency of TSS removal
- ▶ Fast reaction time
- ▶ Wide application field
- ▶ Small dosage
- ▶ Good stability
- ▶ No corrosion effect on equipment







### > Product Attributes

Name	Flocculant	
Mode	Mstn Wy-01	
Aspect	Colorless Transparent Or Light Yellow Liquid	
The Mass Fraction Of Alumina	≥3.0%	
Density 20	1.05-1.45g/Cm3	
Ph	3.0-6.0	
Molecular Weight	≥10000	
Water Insoluble	<1%	
Main Ingredient	Aluminum Sulfate Polymer	
Application	Industrial Sewage Treatment	
Application Fields	Power Generation, Steel, Chemical, Petroleum	
Brand	Mstn	
Origin	Beijing	
Packing Specification	25kg/Barrel	
Customization Of Processing	Yes	

# ➤ Instructions for Usage

#### Product dosage:

according to the water quality, through the test to determine the dosage of the product, so that it can give full play to its role;

#### Accelerated mixing:

after adding the product, the mixing with the treated liquid should be accelerated to facilitate the growth and settlement of floccules.

### > Packing, storage and precautions

#### First aid measures

Eye contact Rinse immediately with water and seek medical attention immediately.

**Ingestion** Induce vomiting, seek medical attention immediately.

#### Operation, disposal and storage

Operation precautions sealed operation, anti-leakage.

Storage precautions Store in a cool, ventilated place, moisture-proof and rainproof.

The product is packed in 25kg plastic drum

# ➤ Case Study Sharing

▶ 4.5 million tons/year heavy oil catalytic cracking unit flue gas desulfurization wastewater treatment of a petrochemical plant



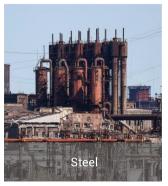
▶ Comparison of wastewater before and after treatment

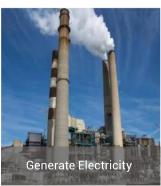
Desulfurization waste liquid treatment of 1.6 million tons/year MCP combined plant flue gas purification project of a refining and chemical plant in Shandong

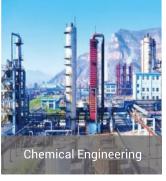


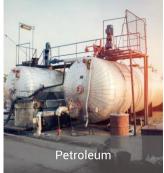
▶ Waste liquid treatment

# > Application Fields

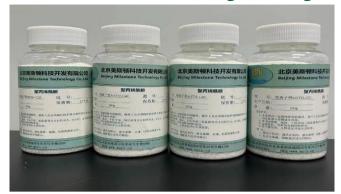






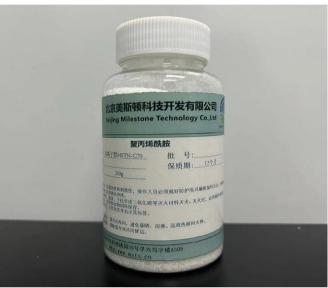


# **Cationic Polyacrylamide**









Cationic polyacrylamide is a linear polymer compound formed by the copolymerization of cationic monomers and acrylamide. Due to its various active groups, it can form hydrogen bonds by affinity and adsorption with many substances.

#### Molecular Structure

#### > Functional Features

Cationic polyacrylamide is a polymer that is soluble in water. At appropriate low concentrations, cationic polyacrylamide solution can be seen as a network structure, where mechanical entanglement and hydrogen bonding between chains jointly form network nodes; When the concentration is high, the PAM solution is in gel shape because the solution contains many chain link contacts. PAM agueous solution has good solubility with many water-soluble organic compounds, which can effectively reduce the frictional resistance of fluids. Adding trace amounts of PAM to water can reduce the frictional resistance by 50-80%.

# > Specification Parameters

Molecular Mass	8-12
Solid Content %	89
Hydrolysis %	50-55
Appearances	White granular

Туре	Hyhydrolysis %	Molecular Mass Million
MSTN-C20	17.5%	≥10.5
MSTN-C40	32.5%	≥11.5
MSTN-C60	48%	≥9.5
MSTN-C70	58%	≥10

# > Application

It is mainly used in solid-liquid separation process in industry, including sedimentation, clarification, thickening and sludge dewatering, etc. The main industries in which it is applied are: oilfield drilling, urban sewage treatment, paper industry, petrochemical industry, metallurgical industry, mineral processing industry, dyeing industry, sugar industry and wastewater treatment of various industries.

In the purification of phosphoric acid, it helps to separate gypsum in the wet phosphoric acid process. Used in fiber slurry (asbestos-cement products), it can improve the drainage of molded asbestos-cement products and increase the strength of asbestos sheet blanks; in insulating boards, it can improve the combining ability of additives and fibers.

# **Anionic Polyacrylamide**

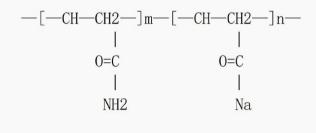






Anionic polyacrylamide is a linear polymer compound made of acrylamide and neutralized acrylic acid copolymerization. Due to its various active groups, it can form hydrogen bonds by affinity and adsorption with many substances.

#### ➤ Molecular Structure



#### > Functional Features

Anionic polyacrylamide is a kind of water-soluble polymer. Due to its clarifying and purifying effects, sedimentation promotion, filtration promotion, thickening and other effects, it has advantages in waste liquid treatment, sludge thickening and dewatering, etc., and can fully meet the requirements of various fields.

#### Instructions for Use

When treating different sewage or sludge, suitable products should be selected according to the treatment process and water quality, and the feeding amount of the agent should be determined according to the concentration of the treated water or the water content of the sludge. Reasonable selection of the placement point and stirring speed, is not only to ensure that the polyacrylamide dilute solution is placed uniformly, but also to avoid floc fragmentation. The equipment in contact with the solution should be made of stainless steel, plastic, glass fiber reinforced plastic or carbon steel coated with resin on the surface.

# > Application

Mainly used in industrial solid-liquid separation process, including sedimentation, clarification, thickening and sludge dewatering process, the main industries are: petrochemical industry, metallurgical industry, mineral processing industry, dyeing industry and sugar industry and a variety of industrial wastewater treatment

# > Specification Parameters

Molecular Mass	9-27 million	
Solid Content %	89	
Hydrolysis %	8.0-24	
Appearances	White Granular	

Туре	Hyhydrolysis %	Molecular Mass Million
MSTN-GS6517	24%	1600-1850
MSTN-GA6519	25%	1800-2100
MSTN-G5517	17.5%	1600-1800
MSTN-6525	20%	2700
MSTN-G2510	8%	900-1200

# **Nonionic Polyacrylamide**



MSTN-N632 nonionic polyacrylamide is a polymer or polyelectrolyte, and its molecular chain contains a certain amount of polar groups which can adsorb the suspended solid particles in the water, so that the bridge between the particles can form a large floc, and accelerate the suspension of the particles in the settlement of the suspension of turbid liquids, which brings a very obvious acceleration of the clarification of turbid liquidsto promote the filtration of such effects.





#### Molecular Structure

#### > Functional Features

Because the molecular chain of MSTN-N632 nonionic polyacrylamide contains amide groups or ionic groups, its distinctive feature is high hydrophilicity, and can be dissolved in water in various proportions. Polyacrylamide aqueous solution has a very good tolerance for electrolytes, not sensitive to such as amine chloride, sodium sulfate, etc., , and also soluble with surfactants.

# > Specification Parameters

Molecular Mass	8-12
Solid Content %	89
Hydrolysis %	50-55
Appearances	White Granular

# > Application

Sewage treatment agent: when the suspended sewage is acidic, the use of non-ionic polyacrylamide as a flocculant is more appropriate. This is its role in adsorption and bridging, so that the suspended particles produce flocculation and precipitation, so as to achieve the purpose of purifying sewage. It also can be used for tap water purification, and especially with inorganic flocculantscan make the best effect in water treatment.

Textile industry auxiliaries: to add some chemicals can be formulated into chemical raw materials for textile sizing.

Sandproof and sand-fixing: non-ionic polyacrylamide dissolved into 0.3% concentration to join the crosslinking agent, sprayed on the desert can play the role of sandproof and sand-fixing.

Soil moisturizing agent: used as soil moisturizing agent and the basic raw material of various modified polyacrylamide.

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