

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cationic Conditioner Polymer NatiFlex™ HC

INCI Name: Polyquaternium-4

Company Name: Joyvo New Material Co., Ltd

Company address: No.35 Dingxing Road, Food Industrial Zone, Yangzhou, Jiangsu, 225004, P.R.China

Date MSDS Prepared: 2012/06/08

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Family: Quaternary Cellulosic Derivatives

Ingredient Name	CAS Registry No.	Typical weight %
No hazardous ingredient		

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects: Possible physical irritant from dust particles. Potential for dust explosion.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure may cause mild irritation.

4. FIRST AID MEASURES

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Treat symptomatically and supportively. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

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5. FIRE FIGHTING MEASURES

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Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Extinguishing Media: Water fog, Foam, Dry Chemical, CO₂

Flammable Limits: Not available.

Products of Combustion: These products are carbon monoxide, carbon dioxide, unknown hydrocarbons.

Fire & Explosion Hazards in Presence of Various Substances:

Product is a finely divided combustible powder and as such constitutes a potential fire hazard. Keep workplace dust levels below the stipulated exposure limits. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity.

Fire Fighting Media and Instructions:

Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

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6. ACCIDENTAL RELEASE MEASURES

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Small Spill:

Normal precautions for "nuisance dust" should be observed. Avoid prolonged inhalation of dust. Sweep up or vacuum up and place in suitable container for disposal.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system.

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7. HANDLING AND STORAGE

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Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Sensitivity to Static Electricity: Yes

Sensitivity to Mechanical Impact: No

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION
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Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves and suitable protective footwear.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

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9. PHYSICAL AND CHEMICAL PROPERTIES
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Physical state and appearance: Solid (Powdered solid)

Odor: Slight

Taste: Not available.

Color: Yellow

pH (1% soln/water): pH of a 1% solution: 6.5-7.5

Boiling Point: Not available.

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Density: 0.48 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

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10. STABILITY AND REACTIVITY

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Stability: The product is stable.

Instability Temperature: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.
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11. TOXICAL INFORMATION

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Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): >2000 mg/kg [Rat].

Chronic Effects on Humans: None of the components present in this material at concentrations equal to or greater than 0.1% are known carcinogens.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m³.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: Moderately irritating to the skin. Practically non-toxic in contact with skin.

Eyes: It may cause eye irritation. However, no information regarding eye irritation was found.

Inhalation: May cause respiratory tract irritation.

The toxicological properties of this substance have not been fully investigated.
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12. ECOLOGICAL INFORMATION

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Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.
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13. DISPOSAL CONSIDERATION

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Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material.

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15. REGULATORY INFORMATION

Federal and State Regulations: No products were found.

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

Not available

S24/25- Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1

Reactivity: 0

p. 5

Specific hazard:

Protective Equipment:

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Splash goggles.

16. OTHER INFORMATION

References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best information currently



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