



# NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.  
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

## Technical Data Sheet (TDS)

### 1. Product Overview

- Product Name: Polyacrylamide (Anionic Type)
- English Name: Polyacrylamide
- CAS Number: 9003-05-8
- Formula:  $(C_3H_5NO)_n$  (Anionic Modified)
- Molecular Weight: Variable (800,000-20,000,000 g/mol)
- Product Characteristics: High-efficiency water-soluble polymer with excellent flocculation, coagulation, and thickening properties. Forms large, dense flocs by adsorbing and bridging suspended particles. Stable over wide pH (5.0-10.0) and temperature ( $\leq 60^\circ C$ ) ranges. Low toxicity, mild, and compatible with most water treatment chemicals. Suitable for multiple industrial applications.

### 2. Technical Specifications (Complies with GB/T 17514-2017)

Item	Specification
Appearance	White to off-white granular powder
Solid Content	$\geq 88.0\%$
Molecular Weight (GPC)	800,000-20,000,000 g/mol
Anionic Degree	20-40%
Hydrolysis Degree	20-30%
Residual Acrylamide Monomer	$\leq 0.05\%$
pH Value (1% Aqueous Solution, 25°C)	6.0-8.0
Heavy Metals (Pb)	$\leq 0.0005\%$
Arsenic (As)	$\leq 0.0001\%$
Insoluble Matter in Water	$\leq 0.2\%$
Particle Size	20-80 mesh (passing rate $\geq 95\%$ )
Dissolution Time (25°C, 1% Solution)	$\leq 60$ minutes

### 3. Product Advantages

1. **Efficient Flocculation:** Forms large, fast-settling flocs, improving solid-liquid separation efficiency.
2. **Wide Adaptability:** Effective in various water quality (high/low turbidity, different pH); compatible with inorganic flocculants (PAC, PFS).
3. **Multi-Functional:** Acts as flocculant, coagulant aid, thickener, and retention aid for multi-scenario use.
4. **Cost-Effective:** Low dosage (0.1-10 mg/L); reduces sludge production and treatment costs.
5. **Environmentally Friendly:** Low residual, biodegradable, no secondary pollution.

### 4. Application Fields

- **Water Treatment:** Municipal sewage treatment (flocculant), drinking water purification (coagulant aid), industrial wastewater treatment (printing, dyeing, papermaking, mining).



# NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.  
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

---

- **Oilfield Industry:** Drilling fluid additive (viscosifier), enhanced oil recovery (EOR) agent, fracturing fluid thickener.
- **Papermaking:** Retention aid, drainage aid, sizing agent; improves paper strength and yield.
- **Sludge Dewatering:** Municipal sludge, industrial sludge (chemical, printing) dewatering agent.
- **Other Fields:** Textile printing (thickener), detergent (dispersant), soil remediation (stabilizer).

## 5. Usage Methods

- **Dosage:**
  - Water Treatment: 0.1-10 mg/L (adjust based on water turbidity).
  - Oilfield Drilling: 0.5-5.0 g/L (drilling fluid formulation).
  - Papermaking: 0.1-1.0% (based on pulp weight).
- **Usage:** Dissolve in water first (0.1-0.5% concentration) with slow stirring (100-200 rpm) to avoid agglomeration; add to target system after full dissolution.
- **Optimal Conditions:** pH 5.0-10.0, temperature  $\leq 60^{\circ}\text{C}$ ; can be compounded with PAC/PFS for enhanced effect.

## 6. Packaging & Storage

- **Packaging Specifications:**
  - 25 kg kraft paper bags with PE inner lining (industrial grade).
  - 1000 kg FIBC bulk bags (large-scale industrial use).
  - Custom packaging available upon request.
- **Storage Conditions:** Store in cool, dry warehouse ( $5-30^{\circ}\text{C}$ ); keep tightly closed; avoid moisture, direct sunlight, and high humidity; store separately from strong acids/oxidizing agents.
- **Shelf Life:** 24 months (unopened, specified conditions); 6 months after opening.
- **Transportation:** Non-dangerous goods; transport by ordinary vehicles; avoid moisture, collision, and physical damage.

## 7. Safety & Protection

- Low irritation; mild skin/eye irritation may occur in sensitive individuals.
- Wear safety glasses, nitrile gloves, and dust mask during handling; avoid dust inhalation.
- In case of skin/eye contact, rinse with plenty of water; seek medical attention if irritation persists.
- Do not ingest; if swallowed, rinse mouth with water and consult a doctor.

## 8. Quality Assurance

- Manufactured in accordance with ISO 9001 quality management system.
- Each batch is tested with a Certificate of Analysis (COA) to meet industrial standards.
- Provide technical support: dosage adjustment, dissolution method optimization, and application problem-solving.