



## TECHNICAL DATA SHEET (TDS)

### Sodium Naphthalene Formaldehyde (SNF) 18%

GREEN AGROCHEM Industrial Chemicals - Concrete Admixture Technical Document

Product Code	GAC-IC-TDS-Sodium-Naphthalene-Formaldehyde-SNF-18-Percent	Revision Date	2026-05-02
CAS No.	36290-04-7	Version	TDS-GAC-IC-2026
Product Type	Non-air-entraining superplasticizer and water-reducing agent	Document Type	Technical Data Sheet

#### 1. Product Identification

Product Name	Sodium Naphthalene Formaldehyde (SNF) 18%
Trade / Technical Name	Sodium Naphthalene Formaldehyde (SNF) 18% Sodium Sulfate Grade
Product Code	GAC-IC-TDS-Sodium-Naphthalene-Formaldehyde-SNF-18-Percent
CAS No.	36290-04-7
Chemical Formula / Type	Polymer / condensation product
Synonyms	PNS; NSF; Poly Naphthalene Sulfonate
HS Code	3824401000
CB Number	CB8129327
Supplier	GREEN AGROCHEM CO., LIMITED
Address	South West Station Road, Fengtai District, Beijing, China
Email	info@greenagrochem.com
Website	www.lignincorp.com

#### 2. Product Description

Sodium Naphthalene Formaldehyde (SNF) 18% is a free-flowing brown to dark brown powder used as a non-air-entraining superplasticizer and water-reducing agent. It is designed for building cement, concrete formulations, oil well cementing and general industrial dispersing applications.

#### 3. Main Specifications

Parameter	Specification
Appearance	Brown to dark brown powder
Solids Content	91% min
Net Starch Fluidity	210 mm min
Sodium Sulfate (Na <sub>2</sub> SO <sub>4</sub> )	18% max
Chloride (Cl <sup>-</sup> ) Content	0.5% max
pH Value	7 - 9
Surface Tension	(71 +/- 1) x 10 <sup>-3</sup> N/m

#### 4. Key Features and Industrial Performance

- High Water Reduction and Strength: Reduces water demand and improves concrete strength development by lowering water-cement ratio.
- Superior Workability: Improves flowability, workability and pumpability while minimizing segregation.
- Cost Optimization: Supports cement and water reduction while maintaining target concrete performance.
- Durability and Safety: No adverse effect on shrinkage under recommended use and non-corrosive to internal steel reinforcement.
- Industrial Versatility: Suitable for construction chemicals, oil well cementing, filler and leather tanning applications.

#### 5. Standard Test Performance Data

Test Item	Acceptance Criteria	Typical / Actual Result
Water Reduction	14% min	16%
Water Penetration Ratio	90% max	85%
Air Content	3% max	2%
Compressive Strength (1 Day)	140% min	160%
Compressive Strength (3 Days)	130% min	155%
Compressive Strength (7 Days)	125% min	135%
Compressive Strength (28 Days)	120% min	125%

Test Item	Acceptance Criteria	Typical / Actual Result
Shrinkage Ratio (28 Days)	135% max	89%

## 6. Applications

- High-range water reducer for concrete.
- Concrete superplasticizer for ready-mix, precast and construction chemical formulations.
- Cement dispersant and oil well cementing admixture.

## 7. Application and Usage Guidelines

- Recommended dosage range: 0.5% - 1.0% by weight of cementitious materials.
- Typical baseline dosage: 0.75%.
- Can be added directly to dry mix or pre-dissolved into water depending on site conditions.

## 8. Packaging

- 25kg woven bags, kraft bags or jumbo bags with inner liner.
- Customized packaging can be supplied according to customer requirements.

## 9. Storage and Shelf Life

- Store in a cool, dry and ventilated warehouse.
- Keep packaging sealed and protect from moisture.

<b>Shelf Life</b>	12 months under recommended storage conditions.
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## 10. Handling and Safety Note

- Avoid dust generation and unnecessary inhalation of powder during handling.
- Wear safety glasses, gloves and dust mask where dusty conditions occur.
- This TDS is for technical guidance only. Refer to the corresponding SDS/MSDS for full safety, transport and disposal information.

## 11. Disclaimer

The information in this Technical Data Sheet is based on available product data and is provided for reference to support product selection and application testing. It does not constitute a warranty or a final specification for every application. Users should conduct their own trials and confirm compliance with local regulations and project requirements before use.

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