TECHNICAL DATA SHEET

Sodium Naphthalene Formaldehyde (SNF) 20% Grade

SNF water reducing agent and dispersant for concrete, cement and industrial formulations

Product Code	GAC-SNF-20	**CAS No.**	36290-04-7
HS Code	3824401000	**CB Number**	CB8129327
Grade / Model	SNF-20%	**Physical Form**	Brown or dark brown powder
Division	Industrial Chemicals	**Website**	www.lignincorp.com

Product Type	Primary Role	Application Focus	Document Status
Sodium naphthalene sulfonate formaldehyde condensate	High-range water reducer / dispersant	Concrete, cement, dispersion and industrial processing	Rewritten TDS based on supplied specification

1. Product Overview

Sodium Naphthalene Formaldehyde (SNF), also referred to as PNS or NSF, is a brown or dark brown powder. It is commonly used as a dispersant, filler, leather tanning agent, building cement concrete water reducing agent and oil well cement water reducing agent.

2. Specification

Parameter	Specification
Model / Grade	SNF-20%
Cement Paste Fluidity	210 mm min
Chloride Content, Cl-	0.5% max
pH Value	7 - 9
Surface Tension	(71 +/- 1) x 10^-3 N/m
Solids Content	91% min
Sodium Sulfate Content, Na2SO4	20% max

3. Technical Features

- Reduces water consumption without affecting normal cement concrete construction, helping reduce internal pores and improve concrete strength.
- Improves workability of cement concrete and reduces construction mixing energy consumption.
- Can reduce cement and water dosage while maintaining performance and mechanical properties, supporting cost-efficient concrete formulations.
- No adverse effect on concrete shrinkage under normal recommended usage and no corrosive effect on steel reinforcement based on supplied product information.

4. Performance Test Data

Item	Age / Condition	Criteria	Actual Result
Water Reduction, %	-	14 min	16
Water Penetration, %	-	90 max	85
Air Content, %	-	3.0 max	2.0
Compressive Strength Ratio, %	1 d	140 min	160
Compressive Strength Ratio, %	3 d	130 min	155
Compressive Strength Ratio, %	7 d	125 min	135
Compressive Strength Ratio, %	28 d	120 min	125
Shrinkage, %	28 d	135 max	89

5. Recommended Usage

- Typical blending dosage: 0.5%-1.0% by weight of cementitious material; 0.75% is recommended as an initial trial dosage.
- Prepare aqueous solutions as required by production or batching conditions.
- Pre-test compatibility with cement, aggregates and other admixtures before commercial application.

6. Packaging, Storage and Handling

Packaging	Woven bags for powder products. Common net weight: 25 kg +/- 0.2 kg, 650 kg +/- 0.2 kg or 700 kg +/- 0.2 kg. Other packing may be arranged by contract.
Storage	Store in a dedicated, dry and well-ventilated warehouse. Keep bags sealed and protected from moisture.
Moisture Handling	If affected by damp conditions, crush the material or dissolve it into solution before use. Product effectiveness should be verified before application.
Cautions	Prevent packages from being torn by sharp objects during transfer or delivery. Avoid dust inhalation and eye/skin contact. Refer to MSDS/SDS before use.

Shelf Life	Typically 12 months when stored in original packaging under dry conditions. Confirm shelf life according to contract and batch documentation.

7. Disclaimer

The information above is based on the supplied technical data and is provided for industrial reference only. Product suitability must be confirmed by the user through application testing under actual conditions. Final specifications are subject to the sales contract, batch COA and original signed/stamped documents.