



# Shandong Jufu Chemical Technology Co., Ltd.

## Material Safety Data Sheet

### Section 1. Chemical Product and Company Identification

**Product Name:** SODIUM NAPHTHALENE SULPHONATE FORMALDEHYDE

**Other Name:** NAPHTHALENE SUPERPLASTICIZER

**Chemical Name:** Sodium  $\beta$ -Naphthalene Sulphonate formaldehyde condensation

**CAS No.:** 9084-06-4

**Application of the substance :**

1. Widely used in precast & ready-mixed concrete, armored concrete and pre-stressed reinforced concrete in key construction projects such as dam and port construction, road building & town planning projects and dwelling erections etc.
2. Suitable for preparation of early-strength, high-strength, high-anti-filtration and selfsealing&pumpable concrete.
3. Used for and widely for self-cured, vapor-cured concrete and its formulations. At the early stage of application, extremely prominent effects are shown. As the result, the modulus and site utilization can be drastically, the procedure of vapor cure is omitted in peakheat summer days. Statistically 40-60 metric tons of coal will be preserved when a metric ton of the material is consumed.
4. Compatible with Portland cement, normal Portland cement, Portland slag cement, flyash cement and Portland pozzolanic cement etc.

**Supplier:** Shandong Jufu Chemical Technology Co., Ltd.

**Add:** Bld. 4-1001, No. 2177, Tianchen Rd., Jinan, Shandong, China-250101

**T/F:** +86-(0)531-88987705 **E:** info@jfchemtech.com

**Website:** <http://www.jfchemtech.com>

### Section 2. Composition/Information on Ingredients

**Main effective ingredient:** Sodium  $\beta$ -Naphthalene Sulphonate formaldehyde condensation

**Molecular Formula:**  $2(C_{10}H_6SO_3Na) \cdot (n-1) CH_2 \cdot (n-2) (C_{10}H_5SO_3Na)$

**Item** SNF-A/B/C

**Content of Chloride (%)**  $\leq 0.3/0.4/0.5$

**Solid Content (%)**  $\geq 91/91/91$

**Na<sub>2</sub>SO<sub>4</sub> Content (%)**  $\leq 5/10/18$

**Notes:** Content of Na<sub>2</sub>SO<sub>4</sub> is measured in accordance with international method of weight.

### Section 3. Hazards identification

**Emergency Overview:** No danger! But dust raisable.

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Inhalation:** May cause respiratory tract irritation.

**Ingestion:** May cause irritation of the digestive tract.



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### **Section 4. First Aid Measures**

**Eyes :** Immediately flush eyes with plenty of water. Then get immediate medical attention if necessary.

**Skin:** Flush in clear water after touching.

**Inhalation:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

**Ingestion:** If swallowed, drink plenty of water, induce vomiting.

### **Section 5. Fire Fighting Measures**

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** No information found

**Flash Points:** No information found

**Flammable Limits:** No information found

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>) and water (H<sub>2</sub>O).

**Fire Hazards in Presence of Various Substances:**

Non-flammable in presence of open flames and sparks, of heat.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: No information found.

Risks of explosion of the product in presence of static discharge: No information found

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam

**Special Remarks on Fire Hazards:** No information found

**Special Remarks on Explosion Hazards:** No information found

### **Section 6. Accidental Release Measures**

**Personal precautions:**

Avoid dust formation. Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

**Environmental precautions:**

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### **Section 7. Handling and Storage**

**Precautions:** Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.

**Storage:** Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials



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should be stored away from extreme heat and away from strong oxidizing agents.

### Section 8. Exposure Controls / Personal Protection

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

**TLV/PEL:**

**TWA:** 15mg/ m<sup>3</sup> total dust

5mg/ m<sup>3</sup> respirable dust (OSHA)

As particles not otherwise regulated (PNOR)

### Section 9. Physical/Chemical Properties

<b>Item</b>	SNF-A/B/C
<b>Appearance</b>	Light brown powder
<b>Net Cement Paste Fluidity ( MM )</b>	≥ 250/240/230
<b>PH value</b>	7 ~ 9
<b>Surface tension(N/m)</b>	(7.1 ± 1) × 10 <sup>-3</sup>
<b>Water-reducing ratio (%)</b>	15-25
<b>Cement reserved ratio (%)</b>	15-20

### Section 10. Stability and Reactivity

**Stability:** The product is stable.

**Instability Temperature:** No information found

**Conditions of Instability:** No information found

**Incompatibility with various substances:** Reactive with oxidizing agents.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** No information found

**Special Remarks on Corrosivity:** No information found

**Polymerization:** No.

### Section 11. Toxicological Information

**Routes of Entry:** Eye contact.

**Toxicity to Animals:** LD50: 2000mg/kg(Rat), LC50: No information found

**Chronic Effects on Humans:** No information found

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

**Special Remarks on Toxicity to Animals:** No information found

**Special Remarks on other Toxic Effects on Humans:** No information found



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**Special Remarks on Chronic Effects on Humans:** No information found

### **Section 12. Ecological Information**

**Ecotoxicity:** No information found

**BOD5 and COD:** The BOD5 is 24000 (5 days), the COD is 1800000mg/l

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. These products are sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>...), some metallic oxides.

**Toxicity of the Products of Biodegradation:** No information found.

**Special Remarks on the Products of Biodegradation:** No information found

### **Section 13. Disposal Considerations**

**Waste disposal of substance:** Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

**Container disposal:** Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

### **Section 14. Package/Transportation Information**

**Package:** 25KGs/40KGs/650KGs weaved bag with plastic inner.

**Transportation:** No hazardous carriage limited.

**DOT Classification(US):** Not dangerous goods

**ADR Classification(Europe):** Not dangerous goods

**IMDG Classification:** Not dangerous goods

**IATA Classification:** Not dangerous goods

### **Section 15: Other Regulatory Information**

**Regulatory Lists: EINECS:** This product is on the European Inventory of Existing Commercial Chemical Substances.

**EC Classification/Labeling:** Not controlled under DSCL(Europe) No specific safety phrase has been found applicable for this product.

**(U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

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

**Health:** 2

**Flammability:** 1



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Reactivity: 0

### **Section 16: Other Information**

**Other Special Considerations:** None  
**MSDS Revision date:** May, 04, 2010  
**The second revision date:** Jun., 02, 2011  
**The latest revision date:** Jan., 12th, 2019  
**Emergency Contact:** +86-(0)531-88987705

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