

## Safety Data Sheet

**ART-JR****1. Chemical Product and Company Identification**

Chemical name	Set Retarding Type High Performance Water Reducing Admixture		
Trade name	ART-JR		
Application	Water Reducing Admixture for Concrete		
Manufacturer	Jiangsu Arit New Materials Co., Ltd		
Address	22 Huixin Road, Nanjing , China	Zip code	211505
Email	info@arit.com		
Contact phone number	86-25-57675555		

**2. Composition/information on ingredients**

Components	CAS No.	Content
Sodium Polycarboxylate Salt	62601-60-9	25.00~26.00%
Sucrose	57-50-1	1.00~2.00%
Gluconic Acid Sodium	527-07-1	1.00~2.00%
Polyethylene Glycol	25322-68-3	0.10~0.50%
Polyethylene-Polypropylene Glycol	9003-11-6	0.10~0.20%
Sodium Acrylate	7446-81-3	0.01~0.05%
2-Methyl-4-Isothiazoline-3-One	2682-20-4	0.05~0.10%
Water	7732-18-5	69.15~72.74%

**3. Hazards Identification**

Hazard Category: This product is an aqueous mixture of organic polymers and compounds. It is non-flammable, non-explosive and non-toxic.

Invasion way: Skin and eyes contact, inhalation and mistake ingestion.

Health effect: May cause eye irritation. No stimulation to skin. May cause stimulation to oral cavity and stomach after mistake intake. No carcinogenicity.

Environment effect: Slight harm to fish and other animals.

Other hazards: None.

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

Skin contact: Take off contaminated clothing and wash off with soap and flowing water.

Eye contact: Rinse immediately with plenty of water or normal saline. Seek immediate medical help if feel itching and painful.

Ingestion: Drink enough warm water and vomit. Consult a physician.

Inhalation: Move to fresh air environment if odor allergies.

#### **5. Fire-fighting Measures**

Hazardous characteristics: None.

Harmful burning waste: The aqueous solution is non-combustible. The solid composition burns to form carbon dioxide.

Extinguishing media: Foam, dry powder, carbon dioxide extinguishers or water sprays.

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

Release measures: Cut off the leakage sources. Prevent the released material from entering confined space such as sewers, flood discharge trench and so on.

Little leakage: Soak up with absorbent material, such as clay, sand, vermiculite or other inert materials. The diluted leakage can be discharged to the wastewater treatment system.

Mass leakage: If the leakage is not contaminated, collect the spills with a clean container for reuse. Construct a barrier or dig pits to hold waste leakage, then pump to tank or special collector, and transport to the waste disposal sites.

Elimination method: Collect the leakage, and wash the leakage with water.

Waste disposal: According to local environmental requirements.

#### **7. Handling and Storage:**

Handling note: Avoid contact with skin or eyes. Wear personal protective equipment.

Storage note: Stored in a cool and dry place, keep away from sunshine, rain, fire and heat.

#### **8. Exposure Controls/Personal Protection**

The maximum allowable concentration: Unlimited.

Monitoring method: No standard.

Engineering control: Ensure adequate ventilation.

Respiratory protection: If this concentration is exceeded, self-contained breathing apparatus must be used.

Eye protection: Safety eyewear is recommended.

Body protection: Workwear is recommended.

Hand protection: Protective gloves are recommended.

Other protection: No eating and drinking in work area in order to avoid the mistake.

### **9. Physical and Chemical Properties:**

Form: liquid

Color: light yellow or transparent

Odor: faint

pH:  $6.0 \pm 1.0$

Melting point: about  $-10^{\circ}\text{C}$

Boiling point: about  $110^{\circ}\text{C}$

Relative density (Water=1):  $1.06 \pm 0.02$

Solubility: Soluble in water

Explosive limit/%(V/V): Insignificance

Flash point: Insignificance

### **10. Stability and Reactivity**

Chemical Stability: Good chemical stability. But if placed in high-temperature summer environment, bacterial contamination, bad smell and appearance deterioration is hard to avoid.

Conditions to avoid: High temperature or frozen environment.

Incompatibility with other materials: Rust, oily substances.

Hazardous polymerization: None.

Decomposition product: None.

### **11. Toxicological Information:**

Acute toxicity: None,  $\text{LD}_{50} > 20 \text{ g/kg}$

Subacute and chronic toxicity: No information available.

Irritation: Have a stimulating effect to eyes, and a mild stimulating effect to mouth and stomach if mistake intake.

Sensitization: None.

Mutagenicity: None.

Teratogenicity: None.

Carcinogenicity: None.

Special note: None.

**12. Ecological Information:**

Ecotoxicity: No information available.

Biodegradability: Partially biodegradable.

Non-biodegradable: No information available.

Bioconcentration or bioaccumulation: No information available.

**13. Disposal Considerations:**

Nature of waste: non-hazardous waste, non-industrial solid waste.

Waste Disposal Method: proper burial place or treatment according to local environmental requirements.

**14. Transport Information:**

Dangerous Goods Code	Not available	Shipping classification	Not available
UN Number	Not available	Packing	Plastic containers, Anti-corrosion tank trucks
Package Markings	Non-dangerous liquid	Transport Caveats	None

**15. Regulatory Information**

This product is not classified as dangerous goods according to transport international regulations (IMDG, IATA, ADR/RID).

It is not limited by the hazardous chemical materials according to safety management regulations.

**16. Additional Information**

Revision date:	June, 2025	Supervisor:	Nanjing University of Technology
Guidance Department:	R & D Center	Version:	Second Edition