

Safety Data Sheet

**ART-P-CASH****1. Chemical Product and Company Identification**

|                      |  |          |        |
|----------------------|--|----------|--------|
| Chemical name        | Early Strength-enhancing Nano Seeds Powder |          |        |
| Product name         | ART-P-CASH                                 |          |        |
| Application          | Increase Early Strength of Concrete        |          |        |
| Company name         | 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.   | Contents     |
|----------------------------------|-----------|--------------|
| Calcium Aluminosilicate          | —         | 65.00~85.00% |
| Polycarboxylate Superplasticizer | —         | 5.00~10.00%  |
| Dispersing Agent                 | —         | 5.00~10.00%  |
| Water                            | 7732-18-5 | 1.00~5.00%   |

**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 accidental ingestion.

Health effect: May cause eye irritation. No stimulation to skin. May cause stimulation to oral cavity and stomach after accidental 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: If experiencing odor sensitivity, move to fresh air environment.

## **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 accidental ingestion.

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

Appearance: Solid

Color: White

Odor: faint

pH: 11.2±1

Melting point: about 300°C

Boiling point: Over 1000°C

Bulk Density (kg/m<sup>3</sup>): 300~600

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, LD<sub>50</sub> > 20 g/kg

Subacute and chronic toxicity: No information available.

Irritation: Has a stimulating effect on eyes, and a mild stimulating effect to mouth and stomach if accidental 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                   |