

GLUCO-Na[®]

Sodium Gluconate



GLUCO-Na[®] is sodium gluconate supplied as a water-soluble solid powder. In cementitious systems it is used as a set-retarding and workability-supporting raw material. It also acts as a chelating ingredient in selected industrial formulations.

Applications

- Concrete admixture formulations requiring increased setting time
- Systems intended to support slump retention in hot weather
- Metal-surface cleaning and plating processes
- Alkaline cleaning and chelating formulations
- Other industrial uses suitable for the supplied grade

Product Characteristics

- Water-soluble solid powder
- Effective chelation of several metal ions
- Useful in alkaline formulations

Advantages / Benefits

- Can increase cement setting time
- Can support slump retention and workability in hot conditions
- May help reduce bleeding and segregation in a balanced formulation
- Forms stable complexes with calcium, iron, copper and aluminium ions

Guideline for Use

Use through a validated admixture formulation or batching procedure. Ensure complete dissolution and uniform distribution. Test actual cement, temperature, water-cement ratio and other admixtures before project use.

Dosage

Determine the optimum dosage by laboratory trials. Small dosage changes can materially alter setting time; no universal dosage is stated in this TDS.

Compatibility

Performance depends strongly on cement chemistry, alkali content, sulfate balance, temperature and the other admixtures present. Evaluate combinations separately and confirm storage stability of liquid formulations.

Concrete Trial Requirements

- Initial and final setting time
- Slump and slump retention
- Bleeding, segregation and air content
- Early and 28-day strength development

Effect of Overdosing

Excessive sodium gluconate can cause severe setting delay and slow early-strength development. Do not scale a laboratory dose to production until robust trials have defined acceptable limits.

Limitations

This TDS does not establish food, pharmaceutical or direct-human-contact grade. Such uses require the appropriate purity specification, certification and regulatory review.

Product Information

Chemical Identity	Sodium gluconate
Physical State	Solid powder
Typical Appearance	White to off-white powder
Solubility	Soluble in water
Primary Function	Set-retarding, workability-supporting and chelating raw material
Packaging	25 kg LDPE bag
Storage Condition	Cool, dry, sealed and protected from moisture
Recommended Dosage	Determine by formulation and concrete trials
Assay / pH / Moisture	Refer to the current commercial specification and batch CoA

Storage

Store in the original sealed bag in a cool, dry, covered and well-ventilated place. Protect from moisture, contamination and direct sunlight. Reseal partly used bags promptly and use clean, dry transfer equipment.

Basis of Data

Technical information in this sheet is based on ALPAKA product information and general industry references. Values described as approximate are not release specifications. Actual performance may vary with raw materials, formulation, temperature, process and site conditions. Verify critical properties on the current batch documentation.

Precautions

Obtain and follow the current product-specific SDS. Avoid ingestion, eye or skin contact and breathing dust. Wear gloves, eye protection and respiratory protection where required. Rinse accidental contact with clean water and seek medical advice if symptoms persist or if swallowed.

Fire / Cleaning and Disposal

Fire classification is governed by the current SDS. Avoid dispersing dust and use an extinguishing medium suitable for the surrounding fire. Collect dry material with controlled dust methods, prevent entry to drains and dispose under local regulations.

Additional Information

For current specifications, application support and trial guidance, contact ALPAKA Chemical Group:
info@alpakagroup.com | +98 933 202 3003 |
www.alpakagroup.com.

Important Notes

The information and recommendations in this Product Data Sheet are given in good faith and reflect ALPAKA's current knowledge of the product when correctly stored, handled and used under normal conditions. Materials, formulations, substrates, production methods and site conditions vary; therefore no warranty of merchantability or fitness for a particular purpose can be inferred from this document. The user is responsible for confirming suitability through representative trials and for complying with applicable laws, standards, approvals and third-party rights. The current commercial specification, batch Certificate of Analysis and product-specific Safety Data Sheet take precedence over this document. Refer to the most recent issue for the product concerned.