Winterset

Chloride Set Accelerator

DESCRIPTION

Winterset is a calcium chloride chemical admixture. It quickens the hydration of portland cement mortars and concrete resulting in shorter setting times and higher early and ultimate strengths. **Winterset** provides improved workability, helps prevent segregation and contains rust inhibitors to slow the corrosion of metal.

USES

Winterset is ideal for use in cold weather applications of concrete or portland cement mortars. **Winterset** is also recommended for wherever it is desirable to reduce setting times, increase early strength or improve mortar workability.

BENEFITS

- Accelerated: Set time increases by 1 to 3 times the initial set
- Pre-Blended: Ready to use
- Performance: Enables masonry to bear loads earlier
- Labor Saving: Allows for earlier removal of concrete forms in concrete work
- Efficient: Decreases mortar segregation
- Effective: Provides more predictable accelerating action
- Consistent: Strict Quality Control testing and standards

STANDARDS

Winterset meets and exceeds the requirements of ASTM C-494 for Type C Accelerating Admixtures.

MIXING

For best results, mix thoroughly before each use. Do not over agitate or use high speed mixing equipment. **Winterset** is added directly to the mixing water. **Winterset** can also be added in the sand or directly to the complete mix. Do not add dry cement. Do not allow **Winterset** to come in contact with other additives before entering the mortar. It is recommended that the exact rate of addition be determined by testing the materials to be used on each job. The rate of additions given below are guidelines based upon a variety of conditions and materials.

TEMPERATURE	SAKRETE 5000 MIX 80 lb	SAKRETE MASONS MIX 80 lb
Above 70°F	1 pt	N/A
70°F to 32°F	1 qt	1 pt
32°F to 25°F	1 qt to 1-1/2 qt	1 pt to 1-1/2 pts
25°F to 15°F	1-1/2 qts to 2 qts	1-1/2 pts to 2 pts

PHYSICAL PROPERTIES

*Complies with National Volatile Organic Compound Emission Standards.

Compressive Strength (ASTM C-109)

SAKRETE 5000	W/ WINTERSET	W/O WINTERSET
1 DAY	2,800 psi (19.31 MPa)	1,700 psi (11.72 MPa)
3 DAYS	3,400 psi (23.44 MPa)	3,400 psi (23.44 MPa)
7 DAYS	4,900 psi (33.78 MPa)	4,300 psi (29.65 MPa)
23 DAYS	5,100 psi (35.16 MPa)	5,000 psi (34.47 MPa)

Rate of Set (ASTM C-266)

SAKRETE 5000	W/ WINTERSET (in minutes)	W/O WINTERSET (in minutes)
INITIAL	70°F - :05 32°F - :10 20°F - :15	70°F - :20 32°F - :34 20°F - :42
FINAL	70°F - :28 32°F - :34 20°F - :42	70°F - :40 32°F - 1:50 20°F - 2:30

Flexural Strength (ASTM C-78)

SAKRETE 5000	W/ WINTERSET	W/O WINTERSET
7 DAYS	455 psi (3.14 MPa)	
FINAL	826 psi (5.70 MPa)	686 psi (4.73 MPa)

STORAGE

Protect from freezing. Store material in an interior, cool dry place above 40°F (4°C). Shelf life is one year in original, unopened container.

CLEAN-UP

Clean tools and equipment with warm, soapy water. After material has dried, it may be necessary to use solvents such as mineral spirits, toluene or xylene.

LIMITATIONS

In addition to limitations already mentioned, please note the following. Although **Winterset** helps prevent freeze damage in the early stages, proper cold weather protection should also be used. Do not use **Winterset** without protecting metal. Test batches are recommended due to variations in local cements, aggregates and other metals used in construction.

Packaging: 1 gal (3.8 L) jug, 5 gal (18.9 L) pail, 55 gal (207.9 L) drum

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REGULATORY

Read and follow application information, precautions and Material Safety Data Information.

HMIS

Health 1, Fire 0, Reactivity 0

VOC Content

0 g/L

CAUTION

Avoid contact with skin. Protective clothing is recommended. Contact areas should be thoroughly washed with soap and water. Avoid contact with eyes. Protective goggles are recommended in case of splashing. Flush eyes with water if contact occurs. Avoid ingestion of material. If ingestion occurs, contact a poison center or physician.

TECHNICAL SERVICE

Contact your US SPEC manufacturer's representative for the most current product information.

US MIX Co.
112 South Santa Fe Drive
Denver, CO 80223
Tel: 303.778.7227 Fax: 303.722.8426
Web Site: www.usspec.com

NOTICE OF LIMITED WARRANTY US MIX Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales, people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price.

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