

3	31 71 19	Tunnel Excavation by Tunnel Boring Machine
31	31 73 13	Cement Tunnel Grouting
	31 74 00	Tunnel Construction

MasterRoc[®] AGA 4 IS

Admixture for TBM annulus grouting

Description

MasterRoc AGA 4 IS admixture is a high performance grout accelerator mainly used for TBM annulus grouting, whose dosage can be varied to achieve the desired setting and hardening times.

Applications

Recommended for use in:

- Tunnel boring machine (TBM) applications
- Grout mixes with or without cementitious binders

Features and Benefits

- Fast and adjustable setting times
- High-early strength
- Low viscosity
- Low consumption

Performance Characteristics

Technical Data

Form	Liquid
Color	Pale yellow
Solubility in water	Total

Properties

	Minimum	Maximum
Specific Gravity (at 68°F [20°C])	1.35	1.37
Sodium Oxide (Na ₂ O), % by mass	8.14	8.51
Silica (SiO ₂), % by mass	26.28	27.35
Mass Ratio (SiO ₂ /Na ₂ O)	3.17	3.27
Viscosity (centipoise at 68 °F [20 °C])	45	80

Guidelines for Use

Application procedure: MasterRoc AGA 41S admixture is a liquid material, which is added into the grout stream as close as possible to the end of the tail shield grout ports.

Dosage: For every yd³ of grout it is expected that 42 to 200 lb (25 to 120 kg for 1 m³ of grout) of MasterRoc AGA 41S admixture will be required. Depending on the required properties of the grout, trial tests should be done to determine the optimum dosage.

Storage and Handling

Storage Temperature: MasterRoc AGA 41S admixture must be stored in a dry place at temperatures between 40 °F and 95 °F (5 °C and 35 °C).

Shelf Life: MasterRoc AGA 41S admixture is non-hazardous. However, it is recommended to follow standard precautions when handling chemicals. Wear eye protection and gloves when handling the product.

Packaging

MasterRoc AGA 41S admixture is supplied in 275-gallon (1041 L) totes, 55-gallon (210 L) drums, and 5-gallon (18.9 L) pails. Bulk delivery is available upon request.

Related Documents

Safety Data Sheet: MasterRoc AGA 41S admixture.

Additional Information

For additional information on MasterRoc AGA 41S admixture, contact your local sales representative.

Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.

Limited Warranty Notice

Master Builders Solutions Admixtures US, LLC ("Master Builders Solutions") warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS SOLUTIONS MAKES

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