

Master X-Seed STE 50

Unique all ages Strength-Enhancing Admixture for cementitious materials

Material Description

Master X-Seed STE 50 is an engineered Strength-Enhancing Admixture, chloride free, that promote the cement hydration and improve the growth of the Calcium Silicate Hydrate crystals. Master X-Seed STE 50 strongly accelerates hydration at early (24 hours), medium and long ages (14-28 days).

Fields of Application

Master X-Seed STE 50, with its peculiar mechanism of action, helps in supporting a sustainable construction by optimization of the concrete mix design. The strength-enhancing property of Master X-Seed STE 50 admixture permits a reduction in the total cementitious materials content of a given concrete mixture while maintaining compressive strength development equivalent to that of reference concrete, with associated benefits in CO₂ emissions reduction. For this reason, Master X-Seed STE 50 is strongly recommended for massive concrete pouring.

Characteristics and Benefits

Master X-Seed STE 50 offers the following benefits:

- Improves Early, medium and late strength acceleration.
- Allows the use of a minimum required cement quantity,
- reducing the cement heat hydration, especially for massive concrete pouring.
- Allows binder optimization by using lower grade, less clinker containing cements or by increasing use of supplementary cementitious materials (Limestone, Fly Ash, Slag).
- Reduces in-place concrete costs when utilized in optimized concrete mixtures.
- Permits earlier stripping and reuse of forms.
- Improved concrete durability aspects.
- Helps reduce CO₂ emissions associated with concrete.

Dosage

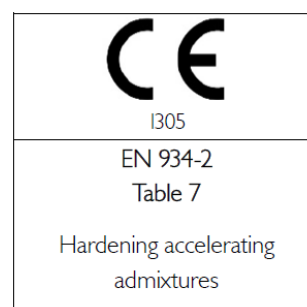
The recommended dosage rate is 1 to 2 litres per 100 kg of cement.

Other dosages may be used in special cases according to specific conditions. In this case please consult our Technical Services Department.

Compatibility

Master X-Seed STE 50 is compatible with all Master Builders Solutions core technologies in particular with:

- MasterGlenium MasterGlenium, MasterEase, MasterSure, MasterCO₂re type superplasticizers for high fluidification power.
- MasterMatrix SDC viscosity modifying agents for robust self-compacting concrete.
- MasterAir air entraining agent, advised when concrete is exposed to a freeze and thawing cycles (following UNI EN 206-1).
- In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking according to UNI EN 934-2 and the relative DoP (Declaration of Performance).



Packaging

Master X-Seed STE 50 is supplied in 1000-litre IBC's and 15 litre containers.

Directions for Use

Master X-Seed STE 50 is a ready-to-use liquid admixture to be added to the concrete during the mixing process. Enough mixing time to secure homogeneous dispersion should be provided.



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Handling and Transportation

The use of protective gloves and glasses are recommended. Do not eat, drink or smoke during application. Master X-Seed STE 50 is non-flammable, non-toxic and is not subject to special transport requirements.

Please refer to the Safety Data Sheet.

Contact Details

Master Builders Solutions UK Ltd
Swinton Hall Road,
Swinton,
Manchester,
M27 4EU

Tel: +44 (0) 161 727 6300

www.master-builders-solutions.com/en-gb

Technical Information	
Form	Liquid
Relative density (g/cc at 20°C)	1.080 – 1.120
Essential characteristic in accordance to EN 934-2	Performance
Chloride ion content	≤ 0.1% by mass
Alkali content (Na ₂ O equivalent)	≤ 3.0%
Corrosion behaviour	Contains only components from EN 934-1 2008
Air content	≤ 2.0 %

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Disclaimer

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Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Spillage

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"Master Builders Solutions UK Ltd" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.