

GREENCEM™ ADMIXTURES



Product – GREENCEM™2 and GREENCEM™4 Admixtures

Mid Range Water Reducer (MRWR)

Other Names: GREENCEM™2
GREENCEM™4

Use: Powdered additive used in concrete mixes

GREENCEM™2 and GREENCEM™4 Admixtures (“GREENCEM™ Admixtures”) are powdered admixtures that enable high levels of cement replacement with supplementary cementitious materials (SCM), such as fly ash and/or slag, to reduce embodied carbon dioxide in concrete mixes without significantly compromising concrete performance.

The inclusion of GREENCEM™ Admixtures may compensate for the typical lower reactivity at early ages when using elevated SCM levels.

The inherent properties of GREENCEM™ Admixtures may also allow the reduction and at times elimination of water reducers and superplasticisers. In certain concrete mixes, all conventional admixtures may be removed completely.

The inherent properties of GREENCEM™ Admixtures will reduce drying shrinkage in concrete and at times may facilitate the removal of shrinkage reducing admixtures from the concrete mix.

If in doubt contact the technical team via the Cement Australia Pty Limited (“Cement Australia”) website by submitting a GREENCEM™ Query or seek professional advice.

Uses and Benefits

GREENCEM™ Admixtures can be used for the following applications:

Lower Carbon Concrete	> 50% reduction via SCM increase
Low shrinkage requirements	< 600µstrain (design dependent)
High early strength with high SCM replacement	>20% SCM replacement in mixes with early strength requirements
Environmental Product Declaration (EPD)	Assist concrete producers in attaining EPDs via higher SCM replacement

Considerations and Exclusions

Trial work is highly recommended as certain mix designs may require a reduction in other admixtures to achieve the required mix performance.

A minimum of 20% general purpose cement is recommended to ensure that the admixture works efficiently and effectively. Note that higher levels of SCM (particularly fly ash) may inadvertently affect plastic properties of the concrete.

GREENCEM™ admixtures are not alkali based activating admixtures and are strictly not intended for use in geopolymer concrete mixes. GREENCEM™ admixtures do not contain calcium chloride.

If in doubt contact the technical team via the Cement Australia website by submitting a GREENCEM™ Query or seek professional advice.

Product Information

GREENCEM™ Admixtures are stable substances, compatible with other building materials and admixtures.

The appropriate handling and usage should be undertaken as per the safety data sheet.

<https://www.cementaustralia.com.au/safety-data-sheets>

Constituents	Calcium Compounds Other non-hazardous materials
Packaging	15kg & 1t bulk bags
Specific Gravity	2.4 - 2.7
Appearance and Colour	Granular and white in colour
Recommended Dosage*	Typical dosage 10 - 30kg/m3
Compatibility	This product is a solid and aspiration hazards are not expected to occur
Application	The sequence of addition; all GREENCEM™ Admixtures are recommended to be added to the empty bowl (or agitator) prior to loading with concrete
Shelf Life	In dry covered storage in sealed packaging in temperatures <30°C, shelf life can be up to 1 year

Approvals and Compliance

GREENCEM™ Admixtures have been tested against AS 1478.1 and meet the requirements of a mid range water reducer.

Due to the nature of these admixtures, these products fall in the Type SN admixture category.

Disclaimer and Advice Note:

This technical data sheet has been prepared by Cement Australia in good faith using the information and/or materials provided – which may or may not fully represent the final/ultimate use conditions. Consequently, concrete mixes using GREENCEM™ Admixtures should be fully trialled and tested under end-use conditions to ensure that the resultant concrete performance meets all needs of the project. Recommendations in this document are based on data established by Cement Australia under specific mix design specifications and are to be taken as a guide only.

Users should rely on their own knowledge and inquiries to make their own determination as to the applicability of this information in relation to their purposes and specific circumstances. Each user should read this document and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

To the extent permitted by law, Cement Australia excludes all implied warranties, conditions and guarantees imposed by legislation. Cement Australia excludes all liability for loss, damage or injury arising from use of the product (i) otherwise than in accordance with the recommendations or (ii) for purposes other than those for which it is ordinarily acquired. For all other loss, damage or injury arising from the use of this product to the extent permitted by law Cement Australia's liability is limited, at its discretion, to refunding the cost of the product or resupplying the product or equivalent product.



To find out if GREENCEM™ is suitable for your project, please contact the Cement Australia Technical Team

cementaustralia.com.au or call 1300 CEMENT (1300 236 368)

