

PRODUCT DATA SHEET

Sika® Stabilizer UW 404

(formerly MasterMatrix® UW 404)

Anti-Washout Admixture

DESCRIPTION

Sika® Stabilizer UW 404 anti-washout admixture is a ready to use, liquid admixture specially developed for concrete placed underwater. Concrete treated with Sika® Stabilizer UW 404 exhibits superior resistance to washout of cement and fines. Suitable for use in hot and tropical climatic conditions.

USES

Sika® Stabilizer UW 404 is recommended for use in all types of concrete pumped or tremied underwater, where thixotropic properties are desired. Sika® Stabilizer UW 404 is especially helpful in extreme conditions where conventional concrete or placing techniques would result in a high percentage of material loss due to washout.

Sika® Stabilizer UW 404 is particularly useful in mortar and grouting applications where mixes are typically more fluid and have a higher potential for washout.

CHARACTERISTICS / ADVANTAGES

Sika® Stabilizer UW 404 produces a concrete mixture highly resistant to washout, while maintaining workability, pumpability, and placeability. The following special qualities are also provided:

- Reduces concrete bleeding
- Thixotropic action provides stiffening after concrete is placed
- Minimises environmental impact of cement washout in water
- Sika® Stabilizer UW 404 reduces or eliminates the need to dewater underwater construction sites before concrete construction can take place
- Concrete can be placed by pump or tremie directly into areas covered by water
- Sika® Stabilizer UW 404 maintains the concrete matrix integrity during high slump placements and reduces washout from the surface during curing
- Reduce or eliminate dewatering costs associated with underwater construction
- Concrete is easy to pump and flows readily into available spaces

PRODUCT INFORMATION

Packaging	210 L drum
Shelf Life	12 months from date of production if stored properly
Storage Conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +7°C and +50°C. Mix well before using.
Appearance / Colour	Brown liquid
Density	~1.05 kg/l (+25°C)
Total Chloride Ion Content	Nil (EN 934-2)

TECHNICAL INFORMATION

Concreting Guidance

The standard rules of good concreting practice for production and placing must be observed when using Sika® Stabilizer UW 404 in concrete. Refer to relevant standards.

For underwater concrete placements, ACI 304R, Chapter 8, "Concrete Placed Underwater" recommends certain basic mixture proportions.

APPLICATION INFORMATION

Recommended Dosage

0.8 - 1.6% by weight of binder

The amount of Sika® Stabilizer UW 404 must be proportionately increased when water content is increased. Additional high range water reducing admixtures may be required to obtain desired workability of the concrete. Please consult our Technical Service for more information and assistance.

Dispensing

Sika® Stabilizer UW 404 should be added to the fresh concrete after all the other mix ingredients have been blended together.

It is also possible to add Sika® Stabilizer UW 404 at the job site provided adequate mixing is conducted.

Compatibility

Sika® Stabilizer UW 404 should be used with a water reducing admixture from the Sika® Plastiment®, SikaPlast® or Sika® ViscoCrete® product ranges. Due to incompatibility, Sika® Stabilizer UW 404 should not be used in conjunction with Sikament® admixtures.

If other Sika® admixtures are to be used with Sika® Stabilizer UW 404, please contact our Sika Technical Department.

BASIS OF PRODUCT DATA

- All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
- Internal Reference - Version: MBS_CC-UAE/ M_Mat-rix_UW404_12_94/v2/02_15

LIMITATIONS

Sika® Stabilizer UW 404 does not adversely affect concrete slump retention.

Sika® Stabilizer UW 404 has minimal effect on concrete setting time.

A slightly higher dosage of air entraining admixture may be required to achieve the desired air content when using Sika® Stabilizer UW 404.

Sika® Stabilizer UW 404 has marginal effect on compressive strength. It should be noted that most underwater concrete mixes proportioned in accordance with ACI 304R have greater compressive strengths than specified. If additional strength is required with the use of Sika® Stabilizer UW 404, a lower water/cement ratio may be necessary.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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