

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-10/0374
of 29 January 2016

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

"Mowilith LDM 6880"

Product family
to which the construction product belongs

Polymeric Concrete Addition

Manufacturer

Celanese Sales Germany GmbH
Am Unisys Park 1
65843 Sulzbach Taunus
DEUTSCHLAND

Manufacturing plant

Celanese Production Germany GmbH & Co. KG
Industriepark Höchst
Gebäude D 326
65926 Frankfurt/Main
DEUTSCHLAND

This European Technical Assessment
contains

5 pages including 1 annex which forms an integral part of
this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

European Assessment Document (EAD)
260006-00-0301

**European Technical Assessment
ETA-10/0374**

Page 2 of 5 | 29 January 2016

English translation prepared by DIBt

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

Specific part

1 Technical description of the product

The polymeric concrete addition "Mowilith LDM 6880" is a copolymer-based, aqueous, saponification resistant polymer dispersion. It reduces the concrete permeability against substances hazardous to water as well as enhances the tensile strength of concrete.

The polymeric concrete addition "Mowilith LDM 6880" is manufactured from specified constituents in a production plant.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The product is a polymeric concrete addition for use in concrete, mortar and other mixes for construction and for the manufacturing of construction products.

The performances given in Section 3 are only valid if the polymeric concrete addition "Mowilith LDM 6880" is used in compliance with the specifications and conditions given in Annex A.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of concrete incorporating the polymeric concrete addition "Mowilith LDM 6880" of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance
Homogeneity	homogeneous
Colour	white
Analysis of dry residue (infrared analysis)	Confirmed by comparison
Analysis of dry residue (thermogravimetric analysis)	Confirmed by comparison
Absolute density	1,03 ± 0,02 g/cm ³
Conventional dry material content	51 ± 2 % by mass
Dynamic viscosity	40 ± 20 mPa·s
pH value	8 ± 1
Total chlorine	≤ 0,10 % by mass
Water soluble chloride	≤ 0,10 % by mass
Setting time	≥ 60 min, ≤ 12 h
Soundness	≤ 10 mm
Air content of fresh concrete	≤ 2 % by volume above control mix
Corrosion behaviour	≤ 10 µA/cm ²
Compressive strength of mortar	≥ 90 %
Compressive strength of concrete	≥ 90 %
Tensile splitting strength	No performance assessed

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 260006-00-0301, the applicable European legal act is: 1999/0469/EC.

The system to be applied is: 1+

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 29 January 2016 by Deutsches Institut für Bautechnik

Uwe Bender
Head of Department

beglaubigt:
Bahlmann

Installation

The product is a polymeric concrete addition for use in concrete, mortar and other mixes for construction and for the manufacturing of construction products.

Direct contact with prestressing steel is not recommended. The use of polymeric concrete addition for grout for prestressing tendons according to EN 447 is not assessed.

The effect on concrete permeability against substances hazardous to water shall be assessed for the individual concrete or concrete element respectively.

The recommended maximum dosage of polymeric concrete addition is 20 % by cement mass. The tolerance of batching the addition shall not exceed a tolerance of ± 3 %.

For determination of the w/c-ratio the polymeric concrete addition shall be taken into account for the water.

The use of concrete additions may cause adverse effects on the properties of concrete, which may be determined. Furthermore the air content of concrete may be increased significantly by the concrete addition.

For each case of application initial tests shall be carried out with the intended concrete composition and the intended addition to demonstrate that the concrete can be processed reliably with the intended consistency provided under the conditions of the site and that the required properties are achieved.

Packaging, transport and storage

Materials shall be handled and stored with care according to EN 934-6.

It is the responsibility of the manufacturer of the product to ensure that the information of these provisions is given to those involved.

NOTE:

Manufacturer's stated values and characteristics shall be provided in writing to the user upon request for:

- analysis of dry residue (infrared analysis and thermogravimetric analysis)
- absolute density
- conventional dry material content
- dynamic viscosity
- pH value

In the production plant the addition shall be stored in closed containers.

The addition may be delivered in suitable bulk-delivery transportation systems, which shall be clean and free of other materials, or in suitable packages. During transportation the addition shall be prevented from pollution.

Packages and documents related to bulk deliveries shall be marked with the manufacturer's name, the product's trademark, the production date and the following information:

- "Freeze-protected storage required"
- "Applicable for 6 months after production"

electronic copy of the eta by dibt: eta-10/0374

"Mowilith LDM 6880"	Annex A
Specifications and conditions for use	