DESCRIPTION

Polychem R is a highly concentrated liquid admixture, set-retarding, which reduces the quantity of mixing water required to produce concrete of a standard consistency with the benefit of extended slump life and workability.

Polychem R conforms to ASTM C 494 and AASHTO M 194 Type B and Type D.

WHERE TO USE

The main applications in concrete of Polychem R are the following:

- when controlled setting times and extended slump life are required, especially in hot weather;
- when improved workability, placement and superior finish are required;
- mass concrete pours and when it is necessary to reduce thermal peaks generated by the development of heat of hydration;
- to avoid cold joints;
- for roller-compactated concrete (RCC) applications.

Polychem R promotes lower water-to-cement ratios, reduced permeability and improved durability of concrete. After initial set occurs, early and ultimate compressive and flexural strengths will be enhanced.

APPLICATION PROCEDURE

Polychem R may be added with the initial mix water or as a delayed addition. Polychem R develops maximum action when added after the mix ingredients of cement, aggregates, mineral addition or filler, and at least 80% of the mixing water.

COMPATIBILITY WITH OTHER PRODUCTS

Polychem R is compatible with most MAPEI/GRT products for preparing quality concrete. It is especially compatible with:

- mid- and high-range water reducers;
- air-entraining admixtures;
- expansive agents and shrinkage-compensating admixtures to produce shrinkage-resistant concrete;
- silica fume-based powder additions;
- class C and class F fly ash;
- various types of limestone fillers for manufacturing self-consolidating concrete and any other type of concrete that requires these fillers;
- all types of Portland cements.

MAPEI/GRT’s Technical Services Department is available to evaluate which admixture or admixture packages are most suitable for any specific need.

DOSAGE RATES

Polychem R has a recommended dosage range of 2 to 5 fl. oz. per 100 lbs. (130 to 325 mL per 100 kg) of cementitious material. Dosage rates outside of the suggested range should be tested before using in production. Contact MAPEI/GRT’s Technical Services Department for assistance.

PACKAGING

Polychem R is available by bulk delivery, in 55-U.S.-gal. (208-L) drums and 275-U.S.-gal. (1,040-L) totes.
STORAGE

Polychem R can be stored for 12 months in sealed containers; it may freeze at temperatures below 32°F (0°C).

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Choose all appropriate safety equipment before use.

For further and complete information about the safe use of our product, please refer to the latest version of our Safety Data Sheet.

Technical Data (typical values)

<table>
<thead>
<tr>
<th>Product Identity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Brown</td>
</tr>
<tr>
<td>Density</td>
<td>10.38 lbs. per U.S. gal. (1,25 kg per L)</td>
</tr>
<tr>
<td>Main action</td>
<td>Set-time retardation and reduction of the mixing water</td>
</tr>
<tr>
<td>ASTM C 494 classification</td>
<td>Type B and Type D</td>
</tr>
<tr>
<td>AASHTO M 194 classification</td>
<td>Type B and Type D</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive. Polychem R does not contain calcium chloride or other chloride-based components. Its use will not contribute to the increased corrosion of reinforcing steel in concrete.</td>
</tr>
</tbody>
</table>

Refer to the SDS for specific data related to health and safety as well as product handling.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. Any alterations to the wording or requirements contained in or derived from this TDS shall void all related MAPEI warranties.

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. Any claim shall be deemed waived unless made in writing to us within fifteen (15) days from date it was, or reasonably should have been, discovered.

We proudly support the following industry organizations:

General Resource Technology, Inc.
2978 Center Court
Eagan, MN 55121
Phone: (651) 454-4151
Fax: (651) 454-4252
Web: www.grtinc.com

Technical Services
1-800-324-8154
Edition Date: April 15, 2018
PR: 8711 MKT: 18-1137