

Polychem SPC is a normal setting, complete-range, water-reducing admixture based on polycarboxylate chemistry.

Polychem SPC is designed to be used in all concrete applications by varying the dosage rate, including those that may require high flow-ability or complete self-consolidating concrete (SCC), while maintaining workability and normal setting characteristics.

Polychem SPC does not contain calcium chloride or any chlorine based components. Its use will not contribute to the increased corrosion of reinforcing steel in concrete.

APPLICABLE STANDARDS

General Resource Technology's **Polychem SPC** is manufactured to conform to ASTM C 494, Types A and F, as well as AASHTO M 194 Types A and F.

ADVANTAGES

- By varying the dosage rate, **Polychem SPC** can be used as a normal, mid-range, or high-range water-reducing admixture
- Improves the quality of the concrete by improving the workability while reducing the water-cementitious ratio
- Increases the early strength development of concrete as well as the ultimate strength (both compressive and flexural)
- Desired strengths can be obtained by reducing cement contents to meet a specified strength without the loss of workability
- Produces a cohesive and non-segregating concrete mixture
- Improves the placement and finishability of all concretes
- Improves pumpability of concrete
- Water reduction of 5-40% attainable

- Reduces surface bleeding
- Increased density as well as lower permeability
- Reduces cracking, creep, and shrinkage.
- Maintains slump life at varying dosage rates during extended mixing or delivery.
- Reduces surface voids.
- Reduces labor/increases productivity.

DIRECTIONS FOR USE

Polychem SPC may be added with the initial mix water or as a delayed addition with the final water at the end of the batch sequence. However, optimum water-reduction is generally obtained with a delayed addition.

Polychem SPC is recommended for use in both air-entrained as well as non air-entrained concretes.

Polychem SPC is formulated to be air-neutral (the amount of air-entrainment needed for a specified air content will be approximately achieved using a standard air dosage).

PACKAGING & AVAILABILITY

Polychem SPC is available in 55 gallon drums, 275 gallon totes and bulk delivery (special applications: 5 gallon/plastic jugs)

Polychem SPC

Complete-Range Water-Reducing Admixture

DOSAGE RATES

Polychem SPC may be used at varying dosage rates to meet the requirements and specifications of all concrete mixtures (Dosage rates may vary due to job conditions and concrete materials, it is recommended that you contact your local General Resource Technology technical sales representative for recommendations on how to optimize performance to meet your specific needs).

Polychem SPC has a recommended dosage rate of 2-3 fluid ounces per 100 pounds of cementitious material to meet ASTM C 494 Type A applications.

Polychem SPC has a recommended dosage rate of 3-6 fluid ounces per 100 pounds of cementitious material to meet most mid-range applications.

Polychem SPC has a recommended dosage rate of 6-20 fluid ounces per 100 pounds of cementitious material to meet ASTM C 494 Type F applications. This may include self-consolidating concrete (SCC) depending on the specification and concrete materials available.

TECHNICAL SERVICE

General Resource Technology has trained, technical sales representatives as well as technical consultants available to all specifiers and users to assist with field use and promotion, specifications and dispenser services. General Resource Technology highly recommends the utilization of these services to ensure optimized concrete performance when using **Polychem SPC**.

COMPATIBILITY

Polychem SPC is compatible with all types of Portland cement, class C and class F fly ash, slag (GGBFS), silica fume, fibers, and approved air-entraining or water-reducing admixtures.

Polychem SPC may be used to produce architectural as well as specialty concretes that contain color. For best results it is recommended that each admixture be added separately to the concrete mixture.

Do not use Polychem SPC in conjunction with other admixtures that may contain some forms of Naphthalene-Sulfonate blends. (Slump, flow-ability, and pump-ability may be adversely affected).

All admixtures produced by General Resource Technology are compatible and recommended for use.

Polychem SPC should be stored at temperatures above 35°F, in clean appropriate storage containers. If **Polychem SPC** freezes; thaw at 45°F or above, and completely reconstitute by mild mechanical agitation. **Do not use pressurized air for agitation.**

WARRANTY

General Resource Technology warrants **Polychem SPC** to be free from defects in materials and manufacture. General Resource Technology is not responsible for conditions outside its control including other materials, workmanship, design, inspection, supervision, labor, ambient temperature, and field conditions, which are the proper responsibility of others.