

PRODUCT DATA SHEET



MANUFACTURER

CalPortland Company
1490 Rubidoux Blvd,
Jurupa Valley, CA 92509
www.CalPortland.com 626.852.6200

CalPortland has long positioned itself as a sustainability pioneer in the construction materials industry. That's why we're introducing a new, low carbon cement – **ADVANCEMENT™ HPT**. This move reflects our deep commitment to sustainability and innovation.

ADVANCEMENT™ HPT, a ternary blended cement, significantly reduces greenhouse gas emissions without compromising performance, helping our customers meet environmental goals and comply with evolving regulations in states like California and Washington.

PRODUCT DESCRIPTION

ADVANCEMENT™ HPT (High Performance Ternary) is a blended cement that integrates traditional portland cement components with additional supplementary cementitious materials (SCMs).

ADVANCEMENT™ HPT delivers optimal performance and superior durability.

ADVANCEMENT™ HPT offers a lower Global Warming-Potential (GWP) and is a more environmentally friendly alternative to traditional portland cement.

PRODUCT APPLICATIONS

ADVANCEMENT™ HPT can be used in most types of concrete construction applications where traditional portland cement is typically used, such as ready-mixed concrete, precast concrete products, bagged cement, and more.

ADVANCEMENT™ HPT is specifically recommended for applications where enhanced durability is preferred, particularly in environments requiring high sulfate resistance.

In addition, **ADVANCEMENT™ HPT** is a preferred choice when Alkali-Silica Reactivity (ASR) is a concern: requiring less SCM, such as fly ash, to meet a specified performance.

BENEFITS

- ✓ Eco-friendly and green alternative to traditional portland cement: approximately 20% less embodied carbon than the industry average.
- ✓ Enhanced sulfate resistance.
- ✓ Improved resistance to alkali-silica reaction (ASR).
- ✓ Superior performance in chloride-rich environments.
- ✓ Good workability, making it easy to place and finish.
- ✓ Improved pumpability.
- ✓ Excellent strength development at both early and long-term stages.

QUALITY

CalPortland is the largest building materials company producing cement and construction material products in the western United States. CalPortland has operations in Alaska, Washington, Oregon, California, Nevada, Arizona, and British Columbia. Since 1891, CalPortland has been producing Quality Unsurpassed cement-based products and delivering material on time and uninterrupted with integrity, reliability and consistency.

STANDARDS

Under ASTM C595 specification – High Sulfate Resistance (HS). AASHTO M 240M/M 240-20. Caltrans approved.

PRODUCT PRECAUTIONS

For precise product application, it is important to refer to the project specifications.

Refer to the applicable CalPortland Safety Data Sheet (SDS), prior to the use of this product. www.CalPortland.com. Contact with cement (including un-hardened concrete, mortar, wet cement, or cement admixtures) can cause skin irritation, severe chemical burns, or serious eye damage. Avoid contact with eyes and skin. Seek immediate medical attention if you have persistent or severe discomfort. In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately.

PRODUCT DATA SHEET



AVAILABILITY

ADVANCEMENT™ HPT is available in bulk quantities at:

- MOJAVE CEMENT PLANT
- ORO GRANDE CEMENT PLANT
- STOCKTON WEST CEMENT TERMINAL

Sacked products are available through select building materials suppliers.

ADDITIONAL TECHNICAL INFORMATION

To ensure optimal performance and successful integration of ADVANCEMENT™ HPT into your concrete formulations and applications, we recommend the following technical considerations during your laboratory trials and project planning:

Admixture Compatibility– Compatibility with different types of admixtures may vary. We recommend conducting lab trials to determine the most effective admixture strategy for your specific mix design. For tailored guidance and advice, please consult CalPortland's Technical Services team.

Supplementary Cementitious Materials (SCMs)– When incorporating SCMs into the concrete mix design, it is important to conduct strength evaluations to ensure performance requirements are achieved.

Alkali-Silica Reaction (ASR) considerations– Due to the ability of natural pozzolans to reduce deleterious internal expansion caused by alkali-silica reaction, the inclusion of natural pozzolan in ADVANCEMENT™ HPT may require lower dosages of additional SCMs (such as fly ash) to achieve desired ASR mitigation, depending on the reactivity of your aggregates. Lab evaluation is advised to optimize SCM content.

ADDITIONAL TECHNICAL INFORMATION (cont.)

Surface Finish and Pumpability– This cement typically offers optimal surface finish characteristics and reduced pump pressure compared to traditional portland cement. However, we recommend coordinating with your finishing crew to ensure proper finishing techniques and to assess whether curing compounds may be beneficial for your application.

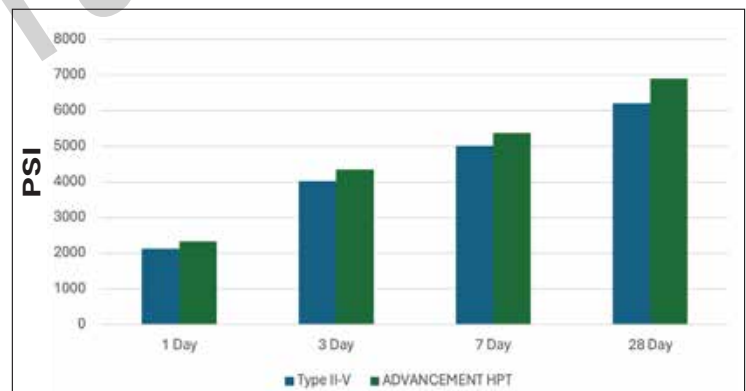
Other Considerations– For certain engineering applications or performance specifications, the use of shrinkage-reducing admixtures (SRAs) may be beneficial. As with all admixture usage, lab trials are encouraged to confirm compatibility and performance.

Consult CalPortland's sales and technical services for recommendations for the use of ADVANCEMENT™ HPT.

www.calportland.com • cementsales@calportland.com



Average ASTM C109 cement compressive strength comparison using Type II/V and ADVANCEMENT™ HPT cement



www.calportland.com



2025

1490 Rubidoux Blvd
Jurupa Valley, CA 92509

Follow Us [f](#) [i](#) [in](#) [x](#)

626.852.6200