

# NOVACAST PV 40

## Concrete Admixture for Precast Concrete Elements to obtain High Early Compressive Strength

### Description

**Novacast PV 40** is a unique combination of the latest generation superplasticisers, based on Melamine Formaldehyde condensate with long side chains and short main chains. This greatly improves cement dispersion and as well as facilitate quick start of hydration process. At the start of the mixing process an electrostatic dispersion occurs but the cement particles have a capacity to separate and disperse. This mechanism considerably reduces the water demand in flowable concrete.

**Novacast PV 40** is a strong superplasticiser allowing production of consistent concrete properties at required dosage.

### Uses

**Novacast PV 40** is a high performance precast superplasticiser intended for applications where reduction in cycle time and early strength are required, and it has been developed for use in

- ✓ Precast concrete elements like Hollow core slabs Block Cement Tiles, Kerbstones, Edgings, other items for garden landscape design, Building blocks, bricks, etc.
- ✓ Concrete requiring high early strength without steam curing
- ✓ High performance concrete

### Advantages

- ✓ Low viscosity admixture suitable for precast elements
- ✓ Suitable for concrete having cement replacements and low water/cement ratio
- ✓ Provides high early strength without increase in cement content or reduction in workability
- ✓ Ideal for precast concrete production
- ✓ Early de-shuttering will result in increased productivity
- ✓ Improves surface finish
- ✓ Minimizes damage due to early handling
- ✓ Better resistance to Carbonation
- ✓ Reduces Shrinkage and Creep
- ✓ Reduces efflorescence

### Standard Compliance

**Novacast PV 40** complies to IS 9103:1999 as a superplasticiser and ASTM C 494 Type F.

### Technical Support

CCI provides technical advisory service for on-site assistance and advice on mix design, admixture selection, evaluation trials and dispensing equipment.

### Properties

Appearance	Light yellow to brownish coloured liquid
pH	Minimum 6.0 *
Chloride content	Product contains a chemical which interferes in the procedure as per IS 9103

\* The uniformity parameters like specific gravity, pH, chloride content etc., will vary for specific customer requirements and mix design. Please refer to our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

### Dosage

The optimum dosage of **Novacast PV 40** to meet specific requirement should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 0.2 L to 2.0 L/100 kg of cementitious material.

### Dosage beyond Limits

Dosage beyond limits can be used to meet particular mix requirements in consultation with CCI technical department.

### Effects of Overdosing

Overdosage may cause delay in the setting time and segregation.

## Packaging

**Novacast PV 40** is available in 20 kg buckets, 200 kg HDPE barrels, and bulk tankers on request.

## Storage & Shelf life

**Novacast PV 40** has a minimum shelf life of 12 months provided the temperature is kept within the range of 2°C and 50°C.

## Precautions

### Health & Safety instructions

**Novacast PV 40** does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come in contact with skin or eyes.

Suitable protective gloves and goggles should be worn.

Before use, refer to the Material Safety Data Sheet (MSDS). The MSDS is available on [www.ccichemicals.in](http://www.ccichemicals.in) or contact us at [info@ccichemicals.in](mailto:info@ccichemicals.in).

## Fire

**Novacast PV 40** is water-based and non-flammable.

## Cleaning and Disposal

Spillage of **Novacast PV 40** should be absorbed onto sand, earth or vermiculite and transferred to suitable container. Remnants should be hosed down with a large quantity of water.

The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

Registered Office	Regional Office	Chennai Plant	Mumbai Plant
Office No. 210 Shah Heritage Commercial CHS Plot No. 9, Sector 48, Seawood Navi Mumbai – 400 706 Maharashtra, India Mobile: +91 93247 27785 E-mail: <a href="mailto:kashinath.bera@ccichemicals.in">kashinath.bera@ccichemicals.in</a>	'LAKSHMAN MANERE' Old No. 17/2, New No. 42/2, R Block 6 <sup>th</sup> Main Road, Anna Nagar West Chennai – 600 040 Tamilnadu, India Mobile: +91 98400 73183 E-mail: <a href="mailto:durai.murugan@ccichemicals.in">durai.murugan@ccichemicals.in</a>	No. 1, Perumal Koil Street Azhinjivakkam Sriperumpudhur Thiruvallur – 602 105 Tamilnadu, India	Plot No. A-51 Taloja Industrial Area MIDC, Taloja Navi Mumbai – 410 208 Maharashtra, India