

About TCL

Established in 1939 at Mithapur, and part of the US\$ 28.8 B Tata Group, Tata Chemicals Limited (TCL) today is the second largest producer of Soda Ash in the world with manufacturing facilities across four

continents. TCL is the pioneer and market leader in the branded, iodised salt segment. TCL is also India's leading manufacturers of urea and phosphatic fertilisers.

Cement Plant

The cement manufacturing unit of Tata Chemicals, Mithapur, is annexed to its main Soda Ash Plant, Mithapur. The Limestone used is the same limestone procured for its Soda Ash unit, which is of exceptional grade having 93-98 % purity against the required 78-80 % for cement plants. Installed in 1993, the cement plant uses modern dry process technology. Also the Gypsum used is of very high grade. It is wellknown that Tata Chemicals is the main supplier of Marine Gypsum to Western and central Indian Cement Plants.

The Plant is equipped with state-of the art technology provided by F.L.Smidth, Denmark, controlled through DCS system supplied by Tata Honeywell Inc.

Besides for quality control, this plant has "PGNAA Gammametrics Bulk Analyser" as well as "OXFORD On stream X-ray Analyser" the first of its kind in India.

TCL uses SAP-ECC 6.0, for all of its ERP applications. TCL has license to produce OPC 53 / PPC (Fly ash based) & Masonary Cement.

Cement

Characteristic of OPC :

Highest grade of cement mentioned in BIS.
Faster deshuttering, saves time and cost.

Give more flexibility to architects and engineers to design sleeker and economical sections.

TATA Shudh 53 Grade O.P.C.

TATA Shudh OPC 53 Grade is a high performance cement far exceeding the codal requirement of IS 12269-1987. It is produced from high quality clinker ground with high purity gypsum.

TATA Shudh 53 Grade O.P.C. with superior compressive strength is ideal for:

Residential, Commercial multi-storeyed building and complexes. All types of RCC, Masonry, Plastering, Flooring and foundation works.

Industrial works and heavy defence structures like Bunkers Culverts, roads, water retaining structures.

Pre-stressed concrete work like bridges, silos, etc..

Pre-cast elements such as Railway sleepers and concrete poles.



Advantages with TATA Shudh 53 Grade O.P.C. :

- ❖ Consistent compressive strength, best suitable for Indian climate.
- ❖ Optimum particle size distribution.
- ❖ High fineness enhances workability with proper water cement ratio ensuring dense and durable concrete.
- ❖ Low heat of hydration, reduces cracks.
- ❖ Highly durable and sound concrete due to very low percentage of alkalis, chlorides, magnesia and free lime in its composition.
- ❖ Almost a negligible chloride content result in restraining corrosion of RCC structure in hostile environment.
- ❖ Consistent quality for consistent performance.
- ❖ Significant saving in cement consumption while making cement concrete and increases output of pre-cast due to high early strength.
- ❖ Dark color giving aesthetic benefit.

Comparing TATA Shudh Results and BIS Specifications

Parameter		TATA Shudh Cement 53 Grade	IS:12269
Sp. Surface (m ² /kg.)		310 ± 10	225m ² /kg. minimum
Setting Time (in minutes)	Intial	110 ± 10	30 minutes minimum
	Final	185 ± 10	600 minutes maximum
Expansion	Le-Chatelier Expansion (in mm)	1.5 mm max.	10 mm maximum
	Autoclave Expansion (in %)	0.04% max.	0.8% maximum
Compressive Strength (Mpa)	3 Days	37 ± 2	27 Mpa minimum
	7 Days	47 ± 2	37 Mpa minimum
	28 Days	60 ± 2	53 Mpa minimum

The above cement complies with the requirements of IS:12269 for O.P.C. 53 Grade.

Technical certificate on quality is available to customer on request.