



Tiling solutions, that help
deliver **tiles** with **style**



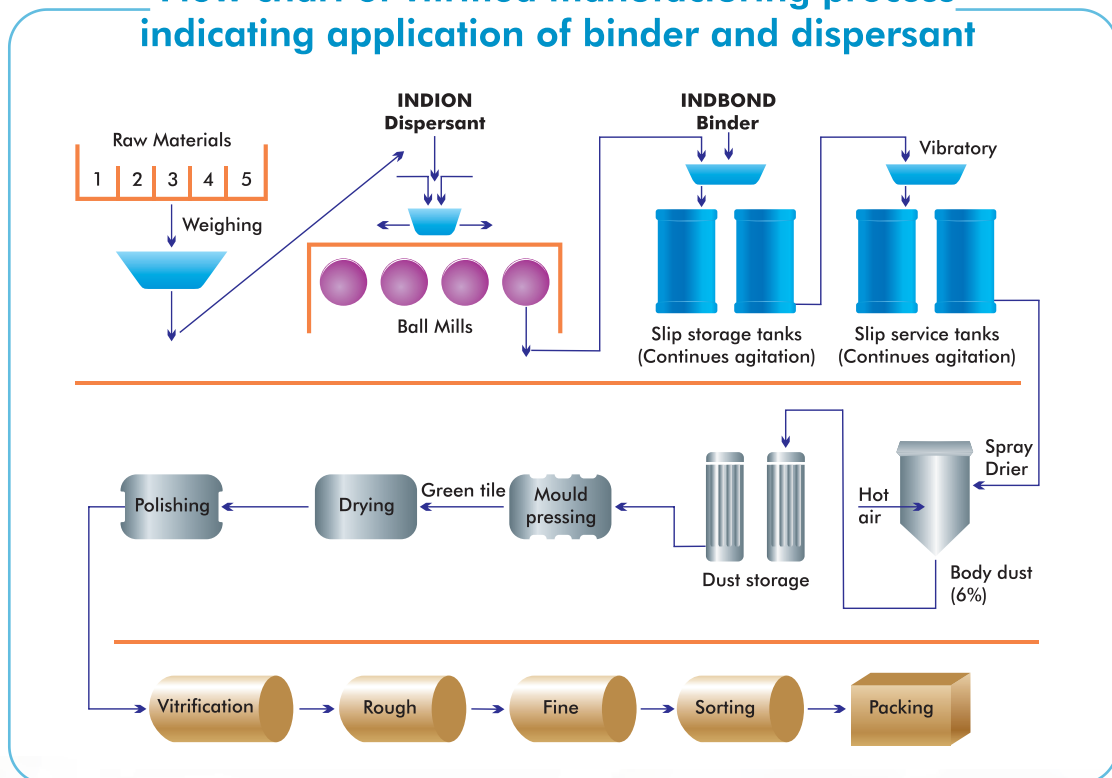
About Ion Exchange

Ion Exchange (India) Ltd. leverages over 47 years of pioneering specialisation in process chemicals, water and environment management to offer solutions to the ceramics industry. These solutions provide cutting edge innovation, reliability and efficiency for optimal production and performance.

Driven by commitment to customer satisfaction, Ion Exchange offers process chemicals - INDBOND Binders and INDION Dispersants - for the ceramics industry that improve the quality of tiles.



Flow chart of vitrified manufacturing process indicating application of binder and dispersant



Over four decades of experience

INDBOND Binder

The raw material used in manufacturing tiles is mostly non-plastic in nature. Hence, green strength and dry strength of tiles is a cause for concern.

INDBOND is an organic binder which is effective and easy to use. It increases the strength in green, dried and fired ceramic materials. It also increases the edge strength of the tiles.

Application

INDBOND Binder is water soluble and acts like a surfactant. When uniformly mixed with the raw material it forms inter-particulate bonds. The development of these bonds contribute to a stronger tri-dimensional structure and an increase in the mechanical strength.

Features:

- Low dosage
- Excellent ability to disperse insoluble inorganic salts and soil particles
- Minimum or no adverse effect on the rheological properties of slip
- Maintains bulk viscosity and stability of high solid slurries
- High efficiency for binding calcium ions
- High temperature stability
- Non toxic
- Cost effective

INDION® Dispersant

INDION Dispersant remains stable prior to its use in casting which makes it a good dispersant.

Application

INDION Dispersants are efficient dispersants for high performance ceramics. They provide stability to dispersion at low dosage and allow them to adsorb effectively onto a solid substrate (finely dispersed particles).

Also, during storage the viscosity of the slurry can increase due to thixotropy, leading to choking of pipelines and spray drier nozzles. Ion Exchange's organic deflocculants, can reduce or completely eliminate thixotropy.

Features:

- Reduces bulk viscosity of high solid slurries and maintains stability of high solid slurries
- Excellent ability to disperse insoluble inorganic salts and soil particles
- To get better performance i.e. higher slurry density at low viscosity (saves fuel cost during spray drying)
- Cost saving due to low dosage
- High temperature stability
- Non toxic



INDION® RESINS

We manufacture a complete range of gel, isoporous and macroporous cation and anion exchange resins to international standards for water and waste water treatment as well as speciality applications.

INDFLOC® Flocculants

Ion Exchange's flocculants are used for solid and liquid separation in the ceramics industry.

Glaze Recovery Systems

- Recovery of expensive raw material which can be reused
- Reduces raw material cost and hence increases profitability
- Eco-friendly system due to substantial waste reduction
- Excellent ROI

Water Softeners

Complete range of packaged water softeners for removal of hardness from water.

Our integrated solutions include:

- Water treatment, waste water treatment and water recycle
- Boiler & cooling water treatment
- O&M contracts
- Water audits, upgradation and automation



To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice.

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