



**WEST BENGAL CHEMICAL
INDUSTRIES LIMITED**

Extraordinary Products from Basic Chemicals



**Chelated Minerals, Injectable API, Mineral Complexes,
DC Grade and Premix of APIs are the most skillful
and thriving achievements of WBCIL.**



PROUD PATENT CERTIFICATES OF 9 MOLECULES

- › Ferric Carboxymaltose - 370845
- › Iron-Isomaltoside - 381772
- › Iron (III) Coordination Complex - 412127
- › Ferric Derisomaltose - 388898
- › Ferric Citrate - 356552
- › Sucroferric Oxyhydroxide - 419785
- › Enclomiphene Citrate - 389779
- › Ferric Carboxymaltose - 434424
- › Ferric maltol - 538762

West Bengal Chemical Industries Limited is one of the world's major manufacturers of mineral chelates and complexes for the pharmaceutical, nutraceutical, food, animal nutrition and agricultural applications. Over 60 years of manufacturing experience (initiated by German collaboration) combined with an innovative spirit and high flexibility enable WBCIL to respond to changing needs of the customers.

All the products have been designed to ensure optimum performance across a broader application. The portfolio includes inter alia Iron, Calcium, Magnesium, Potassium and Zinc salts. Trace elements like Copper, Manganese, Chromium, Boron are part of the product range as well. The minerals are majorly available in form of chelates and complexes as Ascorbate, Acetate, Propionate, Pyrophosphate, Citrate, Aspartate, Gluconate, Bisglycinate, Malate and with several other anions. WBCIL has manufacturing facilities in

Kolkata and Dahej (Gujarat) where both are boasted with cGMP, ISO and HACCP certification. Kosher and Halal certification are also provided on demand of customers.

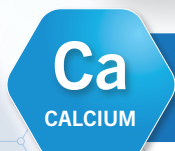
With a sound Quality Management System in place WBCIL's products have audit proved DMF in CTD Formats and some DMF have been submitted to USFDA. All the products are produced at quality levels stipulated by pharmacopoeias, regulatory food guidelines or customer's specifications. This includes the adaptation of chemical and physical parameters like bulk density, particle size, purity, pH-value and some other customer specified critical aspects. WBCIL has a strong research and development team who are working incessantly on latest available molecules like Iron Isomaltoside, Ferric Citrate, Ferric Pyrophosphate Citrate, Liposomal Iron, L – Methyl Folate, Ferric Maltol, Ferric Carboxymaltose, Ferric Derisomaltose, Calcium Lactate Gluconate etc. to keep up with the world market.

Product Compendium



WBCIL has an outstanding and wide range of Iron salts which incorporate the most advanced technologies. The Solubility, Osmolality, Active surface area, Intrinsic dissolution rate, Nil free ferric and Labile iron are some critical parameters which are maintained in the corresponding products.

- | | | |
|----------------------------------|---------------------------|--------------------------------|
| › Liposomal Iron | › Ferrous Ascorbate | › Ferric Carboxymaltose |
| › Ferric Citrate | › Iron Sucrose | › Ferric Pyrophosphate Citrate |
| › Iron Isomaltoside | › Ferrous Bisglycinate | › Ferrous Asparto Glycinate |
| › Iron III Hydroxide Polymaltose | › Ferric Maltol | › Ferric Derisomaltose |
| › Ferric Pyrophosphate | › Ferric Ammonium Citrate | › Ferric Orthophosphate |



Amongst the wide range of Calcium Salts WBCIL covers the highest absorbable, bio available, acid resistant, easy ionizable, less heavy metal varieties.

- | | | |
|-------------------------|---------------------------|------------------------------|
| › Calcium Citrate | › Calcium Orotate | › Calcium Asparto Glycinate |
| › Calcium Acetate | › Calcium Citrate Malate | › Calcium Lactate Gluconate |
| › Calcium Bisglycinate | › Calcium Aspartate | › Calcium Ascorbate |
| › Liposomal Calcium | › Calcium Gluconate (Inj) | › Coral Calcium |
| › Calcium D- Saccharate | › Calcium Borogluconate | › Calcium Amino Acid Chelate |



- › Liposomal
- › Acetate
- › Propionate
- › Citrate
- › Ascorbate
- › Aspartate
- › Bisglycinate
- › Gluconate



- › Liposomal
- › Acetate
- › Propionate
- › Citrate
- › Ascorbate
- › Aspartate
- › Bisglycinate
- › Gluconate



- › Acetate
- › Propionate
- › Citrate
- › Glycinate
- › Orotate
- › Mag. Citrate
- › Aspartate



- › Acetate
- › Propionate
- › Citrate
- › Bisglycinate
- › Oleate
- › Glycine Sulphate
- › Gluconate

Other Products

- › L-Methylfolate
- › Boron Citrate
- › Boron Glycinate
- › Sucroferic Oxyhydroxide
- › Enclomiphene Citrate
- › Sodium Butyrate Food / USP
- › Calcium Butyrate Food Grade
- › Ulipristal Acetate
- › Ascorbyl Palmitate
- › Dimethyl Fumarate
- › L Ornithine L Aspartate

Organic Molecules

- › Aripiprazole
- › Meclizine Hcl
- › Lamotrigine
- › Risperidone
- › Ropivacaine
- › Telmisartan
- › Metformine Hcl

Animal Nutrition

- › Sodium Butyrate (98%, Coated 30, 60 and 90%)
- › Calcium Butyrate (98%, Coated 30, 60 and 90%)
- › Sodium Isobutyrate
- › Calcium Propionate
- › Sodium Propionate
- › Ammonium Propionate
- › Potassium Formate / Diformate
- › Mineral Chelated (Fe, Zn, Mn, Cu, Se)

MANGANESE
SELENIUM CHROMIUM
ZINC COPPER
CALCIUM
MAGNESIUM
BORON
IRON
COBALT
Fe



Chelated Minerals

Mg



New products

- › Calcium Dobesilate
- › Calcium Glucoheptonate
- › Calcium Levulinate
- › Calcium Pidolate
- › Magnesium Orotate
- › Magnesium Lactate Gluconate
- › Magnesium Pidolate
- › Methyl Cobalamin
- › Calcium Orotate
- › Calcium Gluconate Monohydrate
- › Magnesium Gluconate (Anhydrous)
- › Magnesium Boro Gluconate
- › Magnesium Lactate
- › Milk Calcium
- › Liposomal Vitamin C
- › Ferrous Gluconate

Product under development in R&D

- › Copper Gluconate
- › Ferrous Lactate
- › Hydroquinone
- › Potassium Gluconate
- › Tributyrin

DC Granules

Product	Tapped Density gm/cc (NLT)	Untapped Density gm/cc (NLT)	C.I (NMT)	Angle of Repose	Particle Size		Average Tablet Weight (gm)	Elemental Assay w/w (NLT)
					#20 mesh	#80 mesh		
Ferric Citrate	1.00	0.90	15	28	80%	20%	1.0	20%
Ferrous Ascorbate	0.90	0.80	20	26	85%	15%	0.6	20%
Ferrous Fumerate	0.80	0.70	20	28.5	95%	5%	0.3	28%
Iron (III) Hydroxide Polymaltose	0.80	0.65	15	27.8	90%	10%	0.6	30%
Ferrous Sulphate	1.10	1.00	20	27.5	95%	5%	0.2	28%
Calcium Citrate	0.75	0.65	15	26	85%	15%	1.5	20%
Calcium Citrate Malate	0.85	0.75	15	28	90%	10%	1.0	20%



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

(A Joint Venture with Government of West Bengal | A cGMP & ISO 9001 : 2015 Certified Company)

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