# AGROCEL INDUSTRIES PVT LTD "A Dream in Desert"

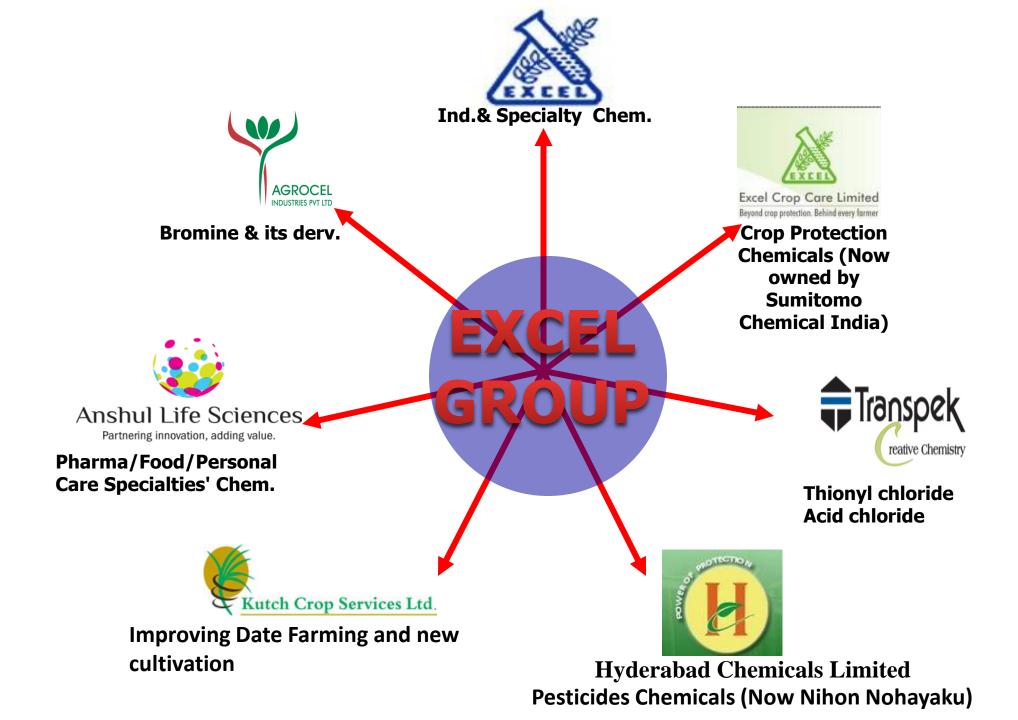


## Introduction

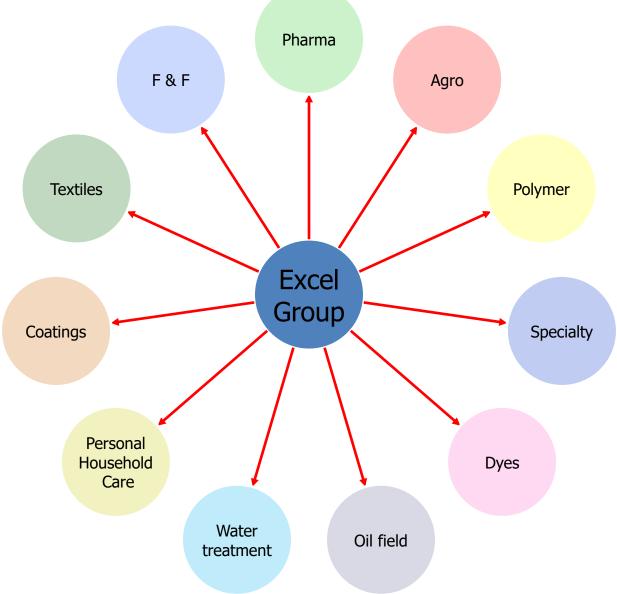
- Agrocel Industries Pvt. Ltd. is from Excel Group of Companies of the Shroff family.
- Agrocel management has more than seven decades of experience in the chemical industry which drives companies to new heights.
- Agrocel works towards creating a self sustaining rural ecosystem that supports economy and trade. Located in the Kutch region western region of India.
- Agrocel Industries Pvt. Ltd. has two divisions:
  - Marine Chemical Division
  - > Agro Service Division
- Agrocel's Marine Chemicals Division has turned desert's harsh geography and climatic conditions into opportunities by establishing a manufacturing facility for extracting Bromine from sea water, thereby using a renewable resource to generate employment and livelihood for over 500 families who otherwise did not have any source of income.



- Excel's journey towards excellence began in 1941. It has always strived to remain relevant to the current issues of the society and the environment.
- Its motto and strength are to provide simple and cost effective solutions in the form of products and/or services.
- Excel has always believed in the capabilities of people of India, to deliver the solutions and has always encouraged their participation.
- Much before "CSR" became the buzz word, Excel had established in 70's, NGOs to generate solutions to problems by community participation resulting in self reliant and confident society.

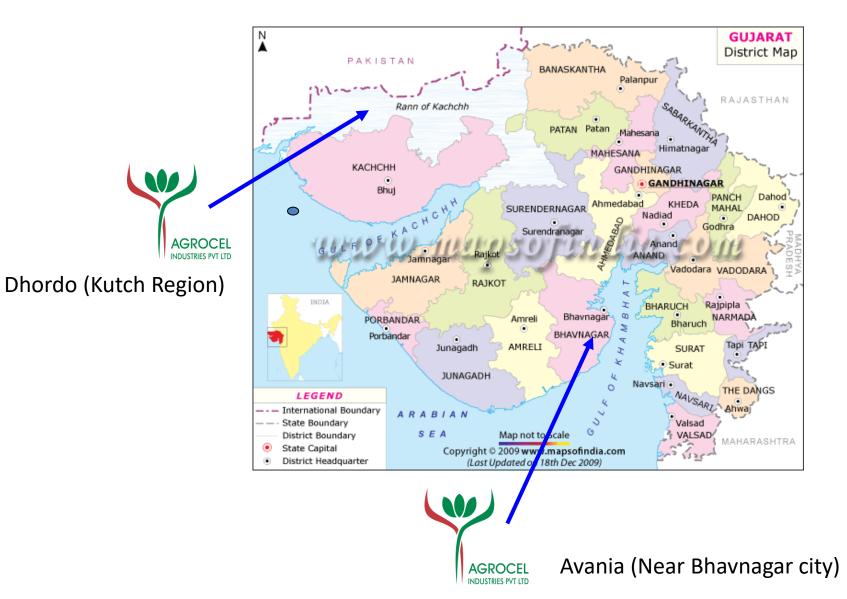


# Presence in Different Fields/Applications





### Manufacturing Site Location in Gujarat (Western region of India)





# Manufacturing Site at Dhordo

#### Total Land Area is around 26700 acres



AGROCE

## Bittern Canal at Dhordo



#### Total Length about : 80 kms.





### Ponds (Crystallizers) of Bittern at Dhordo Plant







# Facilities at Dhordo Plant

- Agrocel has state of the art production facilities for manufacturing 14000 TPA Bromine, 20000 TPA HBr (48%) and 15000 TPA CaBr2.
- For bromine transportation, 20 nos of export worthy ISO tanks each having capacity of 18 MT.
- Agrocel has introduced its new product "Mahalaabh" which is Potassium Schoenite and is 100% water soluble fertilizer, rich source of Potash, Magnesium and Sulphur





Potassium Schoenite
Sulphate of Potash & Magnesium
K2O:23%,MgO:11%,S:15%



Indigenous Potash

Natural Process

♦A High Performance Fertilizer

Potash with Magnesium and Sulphur

Eco friendly (Low chlorine)

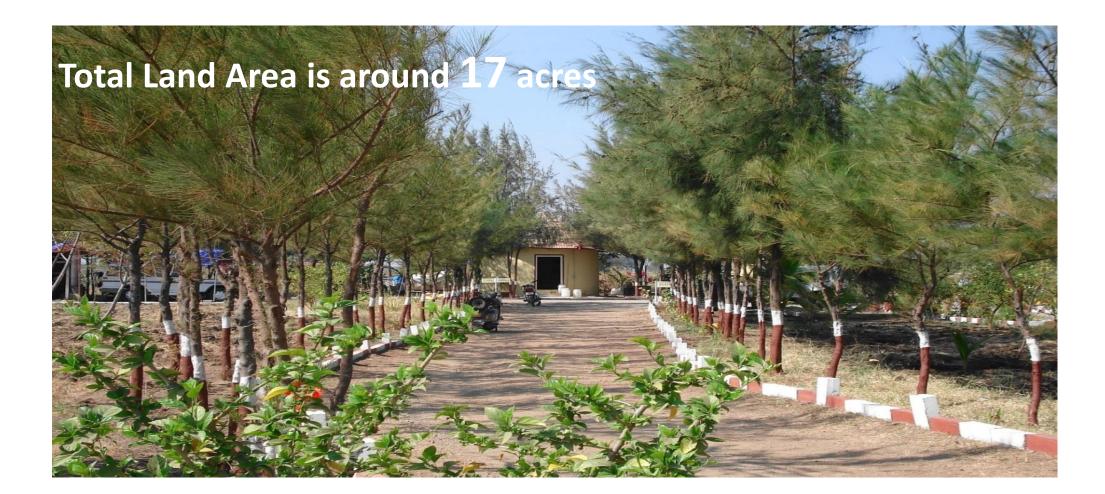
♦A Neutral pH Product



## **NEW Acquisition**

- Agrocel recently acquired Solaris Chem Tech Pvt. Ltd.
- Location: Khavda, Ratadia Region of Kutch
- Land Area: 67500 acres
- Major Product: Bromine HBr (48%) n-Propyl Bromide
- Export worthy ISO tanks for bromine: 9 nos







## Infrastructure

- World class manufacturing facilities for bromine derivatives
- Administrative block
- Warehouse for raw materials and finished goods
- Environment protection section
- Utilities
- Process development lab
- Quality control laboratory



#### Manufacturing Facilities at Avania Plant





#### Manufacturing Facilities at Avania Plant





# Facilities at Avania Plant

- Glass lined reactors 2 KL to 6.3 KL
- High vacuum system: 1 torr capacity
- Weighing & packing systems Fully automated system
- Cooling towers Total 450 TR capacity
- Steam boilers 1.6 TPH LPS
- Chilled water plant 60 TR capacity
- Brine plant 25 TR capacity
- Air compressor 65 CFM
- Air drying 100 CFM

- Nitrogen Units 5 Nm3/hr
- Water softener plant: 5 m3/hr
- Effluent Treatment Plant : 100 KL/day capacity plant, pH treatment, waste minimization
- Distillation/stripping/Absorption/Extraction n facilities
- Heat exchangers/condensers 1.5 cm2 to 32 m2 HT area HEX
- Fire fighting system: Fire hydrant system, fire extinguishers, SCBAs, fire water tanks



#### **Reactions Capabilities:**

Bromine Extraction Brominating agents Bromination Condensation Alkyl Bromination Acyl Bromides Nitration Aryl Bromination Alpha Bromination Esterification

#### **Products Groups:**

Bromine Bromo Esters Bromine Compounds Inorganic Bromine Compounds Custom Manufacturing of Brominated Compounds

Brominating Agents Bromo Acids Alkyl / Acyl Bromides



## List of Products:

#### **BROMINATING AGENTS**

Bromine

Phosphorus Tribromide Hydrobromic Acid (48%)

#### **BROMO ESTERS**

Benzyl Bromo Acetate Ethyl Bromo Acetate Methyl Bromo Acetate Tertiary Butyl Bromo Acetate Ethyl 2-Bromo Butyrate Methyl 2-Bromo Butyrate AILKYL/ BROMIDES Acetyl Bromide Benzyl Bromide Allyl Bromide Propionyl Bromide n-Propyl Bromide Iso Propyl Bromide

BROMO ACIDS Bromo Acetic Acid 2-Bromovaleric Acid 2-Bromopropionic Acid

#### **BROMINE COMPOUNDS**

Bromo Acetyl Bromide 2-Bromo Propionyl Promide 4-bromo-2-Chloro Phenol 1-Bromo-3-Chloro Propane Trans-2, 3 Dibromo-2 Butene 1, 4 Diol

INORGANIC BROMINE COMPOUNDS Calcium Bromide (52%) Sodium Bromide (45%)



# Process Development & Quality Assurance

- Team of qualified chemists led by scientists having extensive experience in product development
- Focus on process development & optimization
- Delivering high quality products within stipulated time frame
- In house testing instruments for raw materials, in process materials & finished products with quality management system to meet stringent quality standards consistently
- Modern Development & Analytical Facilities: GC machines, Karl Fisher machine, Refractometer etc.
- Company having ISO 9001:2015 for QMS



## ISO 9001:2015 Certificates





# Environment Health Safety (EHS)

- Adequate ETP plant capacity to meet environment norms
- ETP plant having facilities of automated neutralization, settling, biological treatment, polishing etc.
- Development of new chemistry and process to minimize effluent and maximize recycle.
- Fire fighting system: Fire hydrant system, fire extinguishers, SCBAs, fire water tanks
- Safety procedures & protocols designed to ensure employee and asset safety
- Regular training impared to employees and contractors on safe handling of hazardous materials
- On-site emergency evacuation drills to test preparedness



# Agro Service Division

Agrocel's Agro Service division is focused on providing service to farmers by promoting sustainable agriculture through capacity building, knowledge and skill transfer. It provides service to farmers by:

- Improving soil health and nutrition
- Managing water and irrigation
- Facilitating access to quality seed and inputs
- Improving quality and yield of output
- Providing market access for their output
- Bringing awareness on issues such as decent work, child labour, gender equality, community development etc



# **Promoted NGOs**

- Shree Vivekanand Research & Training Institute (VRTI)
- Shrujan Trust (Shrujan)
- Shroffs Foundation Trust (SFT)
- Vivekanand Gramo udhyog Society (VGS)
- C. C. Shroff Self Help Centre (CCSSHC)
- Shroff Family Charitable Trust (SFCT)
- C C Shroff Hospital
- The Indian Centre for Climate and Societal Impacts Research (ICCSIR)



