MS JAIN GROUP WELCOMES YOU ALL

GEOPOLYMER WORKSHOP 2015
Sodium silicate ...
... to Geopolymer

By R. V. RAMANI

KIRAN GLOBAL CHEMS LIMITED
Manufacturing Silicates and derivatives since 1979

33 silicate manufacturing units in India, UAE, Egypt, South Africa & Qatar

Largest manufacturer in all 5 countries
- In-house R & D approved by DSIR, GOI
- First to develop silicates for quick setting tunnel grouts
- Developed technology for Geopolymer concrete in collaboration with SRMU
PRODUCTS

- Silicate liquid/cullets - Sodium & Potassium
- KIRANSIL – Geopolymer Tunnel grouts
- Precipitated silica – Tyre & Oral
- ALACRETE – Geopolymer concrete products
Product Name: SODIUM SILICATE LIQUID
HSS code No: 28 39 19 00
CAS NO: 13 44 09 8
HYDRO THERMAL PROCESS
R & D

- NEW PRODUCT DEVELOPMENT
- PRODUCTION / PLANT IMPROVEMENT
- PROCESS – TECHNOLOGY DEVELOPMENT
- ENERGY CONSERVATION – WASTE RECYCLING
- VALUE ADDED PRODUCTS
GROUTING FACILITY AT SITE

GROUNTS IN METROS
'ALACRETE™
Geopolymer Concrete
Benefits of Geopolymer concrete
Green buildings

- Highly resistant to acids, toxic waste and salt water, high compressive strength, low shrinkage
- Reduces carbon dioxide/particle emissions
- Uses no Portland cement, no water for curing
- Fire and heat resistance (-20 to 700°C)
- Waste industrial products like fly ash and GGBS used
- Conserve acres of land used for landfill & limestone mining

THE GREEN QUOTIENT
GEOPOLYMER CEMENT/ CONCRETE

- Earth Friendly Materials
- Energy Saving – Low Carbon
- Waste Utilisation – Recycling
- Local Materials – Logistics
- More Stronger
- Durable
- Easily Available
- Affordable
CHENNAI METROPOLITAN WATER SUPPLY AND SEWAGE BOARD

36MLD STP TAILORED TO TREAT 18MLD BASED ON SEQUENTIAL BATCH REACTOR (SBR) TECHNOLOGY AT SHOLINGANALLUR

CONTRACTOR

Dee - Tech Projects Pvt. Ltd.
utilize the waste materials as source material

alkaline activator to acts as binder

Compressive strength upto 35 mpa in 24 hours

IDEAL for precast industry

NO water curing

QUICK repairs

Superior to portland cement

Truly Green building material
BUILDING PRODUCTS

PAVER & KERBS
BRICKS & BLOCKS
ROOFING & WALL PANEL
BALLUSTERS & STAIRWAYS
PREFAB TOILETS & SECURITY CABIN
Increase in building value – 10%

Decrease in operating cost – 13%
OPPORTUNITIES

- Growing concern for ecology & sustainability
- Utilisation of industrial waste materials
- Shortage of natural sand
- No water curing required
LIMITING FACTORS COMPARED TO PORTLAND CEMENT

- Availability of Silicates, Slag
- Technology
- Raw material sourcing, logistics
- Standardisation
OUR STRATEGY

- DEVELOPMENT of Industrial products
- TARGET Green building segment only
- START with Prefinished, prefab products
- FOCUS on Roads & Pavements
- ACCRA
INDUSTRIAL PRODUCTS

CHIMNEY & REFRACTORY

RAILWAY SLEEPERS &

TUNNEL SEGMENTS

SEWERAGE PIPES
LIGHTING &

TRANSMISSION POLES

BALLAST & FURNITURE
R & D SUPPORT

• TIE UP with SRMU
• ACCREDITED R & d CENTRE
• OFFER FREE SILICATES FOR GEOPOLYMER RESEARCH
• STUDENT’S INTERNSHIP PROGRAMME
• EXCLUSIVE FREE WORKSHOPS FOR STUDENTS IN THEIR COLLEGE
Decorative products - Moulded

Exciting Solutions for Classy buildings

Architraves, Mouldings, skirting, Balustrades ..
Mosaic Tiles - Geometric

Exciting Solutions for Classy buildings
Mosaic Tiles - Geometric

Exciting Solutions for Classy buildings
Facing tiles

Exciting Solutions for Classy buildings
Sidewalk & paving Solutions

Exciting Solutions for Classy buildings
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