# CHLORINATED POLYETHYLENE (CPE) CHLOREX C35 Polymeric Elastomers

**Chlorex** is a Chlorinated Polyethylene Elastomer specially polymerized by combining Chlorine & Polyethylene in an aqueous slurry process. This process produces saturated linear molecular back-bone which gives **Chlorex** elastomers many advantages in applications requiring ignition, Weather, Ozone, Fire, oil and cold / Heat resistance, especially in Rubber Vulcanizate.

**Chlorex** is primarily also used as a Modifier for Synthetic Rubbers improving various Physical and Mechanical properties at the same time improving processability. **Chlorex** is also used as a modifier for PVC, EVA and other Polyolefin's which significantly improves Impact Resistance of Rigid PVC and gives excellent Ductility, Chemical Resistance to PVC & improves Compression Set due to presence of Chlorine.

# Compatibility:

Easily bendable with most Rubbers SBR, BR, CR, CSM, EPDM, NBR, NBR/PVC, etc... and also used as a modifier for **PVC**, **EVA**, **PE**, **ABS** etc...

### **Characteristics:**

**Chlorex** when compounded with other materials mentioned above produce either thermoset or thermoplastic material especially designed to meet demanding criteria including

- · Durability
- Excellent Ignition Resistance
- Resistance to Weathering, Sunlight & Ozone resistance
- Resistance to a range of Acid and Alkaline liquids
- Resistance to Oil & Fuels
- Low-temperature Flexibility

- Excellent resistance to cut-through, Crush & Abrasion
- Low Coefficient of Friction
- Lead & Lead free formulations
- Improves Surface finish
- Facilitate easy Mould release
- Resistance to Heat Deformation
- Excellent Electrical Resistance

# **Applications:**

Moulded products like Gasket, Industrial & Automotive Hoses, High performance industrial Hoses, Tubing, Air Ducts, General Moulding, Conveyer Belting, Rubber Sheets, Dock Fenders, Power Cables, PVC modification, Footwear and extrusions etc...

## **Processing:**

Chlorex can be **processed on** conventional rubber machinery and/or plastic machinery. Apart from increasing polymer content in the vulcanizate material **Chlorex also works as an internal lubricant/plasticizer** which helps **easy processing in mixing,** extrusion, calendaring, moulding etc...

**Chlorex** is a free flowing powder and can be added in dry blend or directly fed to extruder, Mixing Mill, Kneader. Chlorine content > 35% allows high Filler & Plasticizer loading which helps lower cost of compound

Chlorine Content%	Hardness Shore A	Tensile Strength Mpa	Melting Point °C	Volatiles %	Break Elongation % ≥	Mooney Viscosity ML <sub>(1+4)</sub> @120°C
35±1	60	6	120	0.3	600	70~80

