

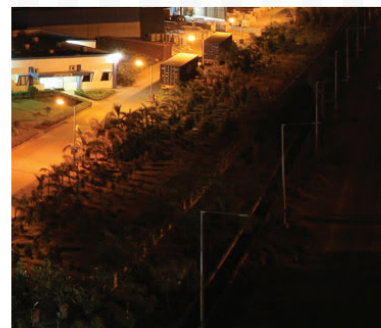
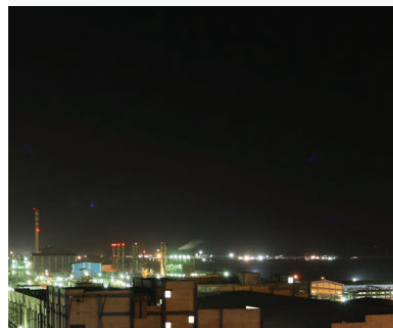
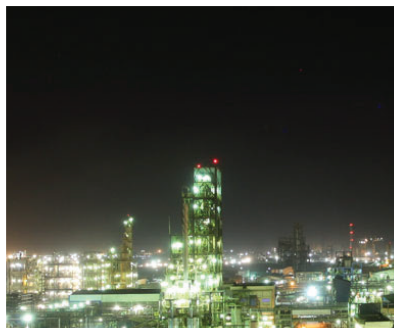
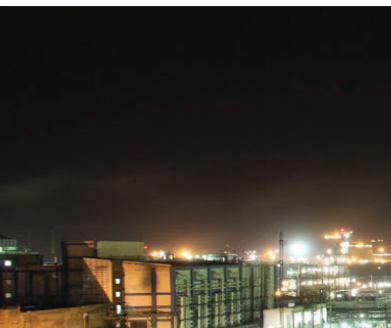


FLUONOX[®]
Fluoroelastomers

Engineered for
demanding applications

ABOUT THE COMPANY

Gujarat Fluorochemicals Limited (GFL), is a part of the INOXGFL Group - an Indian Conglomerate with a legacy of more than a century. The group has diversified business segments comprising of Fluoropolymers, Speciality Chemicals, Battery Chemicals, Wind Energy and Renewables.



GFL is a leading producer of Fluoropolymers, Fluoro specialties, Refrigerants and Chemicals for applications in varied industries. GFL derives its strength from expertise in Fluorine Chemistry, vertical integration from natural minerals to Fluoropolymers and strong R&D, enabling us to provide one of the best quality products meeting all regulatory compliances, to our clientele globally. GFL started with India's largest Refrigerant manufacturing unit at Ranjitnagar, Gujarat, India. Foraying into new avenues in 2007, with one of the world's most integrated facilities at Dahej, Gujarat, India, GFL now has a diverse portfolio of Fluoropolymers comprising PTFE, PFA, FKM, PVDF and Fluoropolymer Additives. By setting up capacities for materials (Fluoropolymers and Speciality Chemicals) catering to new growth sectors, the group is extending its reach into EVs, Solar Energy and Hydrogen Fuel Cells. Several capacities are being set up at GFL including those for PVDF used as cathode binders in EV batteries, chemicals for EV batteries and membranes for Hydrogen Electrolysers.

With three manufacturing facilities in India, a captive Fluorspar mine in Morocco, offices and warehouses in Europe and USA, and a marketing network spread across the world, GFL is one of the most established players in Fluoropolymers and Fluorospecialties markets globally.

COPOLYMER RAW GUMS

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KR 210	66.0	-18(-0.4)	10	Very low viscosity copolymer raw gum.	Used for coatings or as a viscosity modifier for all FKM.
KR 220	66.0	-18(-0.4)	22	Low viscosity copolymer raw gum.	General purpose.
KR 221F	66.0	-18(-0.4)	20	Low viscosity copolymer raw gum - fast cure.	Low Compression set. Injection molding.
KR 230	66.0	-18(-0.4)	30	Medium-low viscosity copolymer raw gum-fast cure.	Low Compression set. Injection/compression molding.
KR 235	66.0	-18(-0.4)	28	Medium-low viscosity copolymer raw gum.	General purpose. Injection molding.
KR 250	66.0	-18(-0.4)	46	Medium viscosity copolymer raw gum.	General purpose. Compression/transfer molding.
KR 260	66.0	-18(-0.4)	55	Medium-high viscosity copolymer raw gum.	General purpose. Compression/transfer molding.
KR 270	66.0	-18(-0.4)	70	High viscosity copolymer raw gum.	General purpose. Compression/transfer molding.

Our Bisphenol curable raw gums can be added with the desired level of curatives or dissolved into solvents for coatings applications. They can also be used to modify viscosity and/or crosslinking density of standard cure incorporated grades.

Features

- No pre-addition of curatives: this allows flexibility in crosslinking density and cure speed based on final product and process
- Available in different viscosities

COPOLYMER CURE INCORPORATED

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KB 2203	66.0	-18(-0.4)	21	Low viscosity Copolymer. Very good flowability.	Injection, compression, transfer molding, extrusion and calendaring.
KB 2250Z	66.0	-18(-0.4)	23	Excellent mold flow, tear resistance and bonding to metal.	Injection molding of complex shapes - Metal bonding.
KB 2252	66.0	-18(-0.4)	23	Excellent mold flow, high elongation/hot tear resistance.	Injection, compression, transfer molding of complex shapes, calendaring and extrusion.
KB 2253	66.0	-18(-0.4)	23	Fast cure rate, excellent mold release.	Injection molding, O-rings, gaskets.
KB 2255	66.0	-18(-0.4)	23	Very good compression set. High crosslink density.	Injection molding, O-rings, seals, gaskets.
KB 2259F	66.0	-18(-0.4)	25	Outstanding compression set, low post cure time.	Injection molding O-rings, gasket.
KB 2400Z	66.0	-18(-0.4)	40	Excellent mold flow, tear resistance. Excellent bonding to metal.	Injection/Compression/transfer molding. Bonded seals and gaskets.
KB 2402	66.0	-18(-0.4)	40	Excellent mold flow, high elongation/hot tear resistance.	Compression/transfer molding of complex shapes.
KB 2403	66.0	-18(-0.4)	40	Very good compression set. High crosslink density.	Compression, transfer or injection molding of O-rings and seals.
KB 2652	66.0	-18(-0.4)	65	High Viscosity Copolymer, very good compression set, hot tear resistance.	Compression molding of gaskets and seals.

Our copolymer Bisphenol AF cure incorporated grades offer improved compression set resistance, excellent heat stability and improved process safety.

Features

- Excellent scorch safety
- Excellent compression set
- Good mold release
- No mold fouling
- Excellent hot tear resistance

TERPOLYMER RAW GUMS

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KR 325	68.0	-14(7)	25	Improved chemical resistance. Excellent processability.	General purpose. injection, compression molding and extrusion profiles.
KR 370	68.0	-14(7)	70	High viscosity. Excellent processability.	General purpose. Compression, molding of oil seals, shaft seals.
KR 435	68.5	-13(9)	30	Excellent chemical resistance including oxygenated fuels.	General purpose, injection, compression molding, coating applications.
KR 470	68.5	-13(9)	65	Excellent chemical resistance to mineral oils.	General purpose. Compression molding.
KR 430	69.0	-10(14)	31	Excellent Chemical resistance including oxygenated fuels. Soluble in polar solvents.	General purpose. injection, compression and transfer molding, coating applications.
KR 540	70.0	-7(19)	45	High Fluorine terpolymer. Excellent chemical resistance and low fuel permeability.	General purpose. Injection, compression molding.

Our Bisphenol curable raw gums provide improved chemical resistance compared to copolymers and offer excellent processability.

Features

- Good chemical resistance
- Good heat resistance
- Good compression set
- No mold fouling

TERPOLYMER BISPHENOL CURE INCORPORATED

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KB 3300Z	68.0	-14(7)	30	Excellent hot tear resistance and bonding to metal.	Injection, compression, transfer molding of oil seals, shaft seals, gaskets.
KB 4303	68.5	-13(9)	30	High crosslinking density, excellent compression set.	Injection molding of O-rings, gaskets, seals.
KB 4602	68.5	-13(9)	60	Excellent chemical and hot tear resistance.	Compression and transfer molding of complex shapes like shaft seals, valve seals, gaskets.
KB 4603	68.5	-13(9)	60	High viscosity, high crosslinking density, excellent compression set.	Compression and transfer molding of O-rings, gaskets, seals.
KB 4202	69.0	-10(14)	35	Bimodal architecture. Excellent resistance to blended fuels, very good permeation resistance.	Extrusion applications like fuel hoses for E20 applications.
KB 5301	70.0	-9(16)	30	Low viscosity, high Fluorine terpolymer. Excellent chemical resistance.	Extrusion applications. Excellent E20 resistance.
KB 5503	70.0	-7(19)	50	Medium viscosity, high Fluorine terpolymer. Excellent Chemical resistance including oxygenated fuels. Very low fuel permeability.	Injection, compression, transfer molding of O-rings, gaskets and seals.

Our Terpolymer Bisphenol AF cure incorporated grades offer good chemical resistance, excellent heat stability and improved process safety.

Features

- Excellent chemical resistance
- Good heat resistance
- Good compression set
- No mold fouling
- Very low fuel permeation

TERPOLYMER BISPHENOL

LOW TEMPERATURE

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KR 630	66.0	-19(-2)	30	Low temperature terpolymer with TR 10 at -19°C (-2°F) - Raw gum. Good compression set resistance and good chemical resistance.	General purpose. Injection and transfer molding for O-rings, gasket and seals.
KB 6253	66.0	-19(-2)	25	Low temperature terpolymer with TR 10 at -19°C (-2°F) - Cure incorporated. Good compression set resistance. Good chemical resistance.	Compression, transfer or injection molding of O-rings, gaskets and seals.

Our special terpolymer shows improved low TR 10 compared to standard copolymers. Available as raw gum or precompound.

Features

- Good chemical resistance
- Improved low temperature properties (TR 10 -19°C)
- Good heat resistance
- Good compression set
- No mold fouling

PEROXIDE CURABLE

RAW GUMS

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KR 320P	67.0	-15(5)	20	Low viscosity medium-low Fluorine peroxide curable terpolymer.	Injection, transfer, compression molding of O-rings, shaft seals, gaskets and extruded profiles.
KR 340P	67.0	-15(5)	45	Medium viscosity medium-low Fluorine peroxide curable terpolymer	
KR 520P	70.0	-5(23)	20	Low viscosity, high Fluorine terpolymer.	Best chemical resistance among FKMs. Injection, transfer, compression molding of O-rings, shaft seals, gaskets and extruded profiles.
KR 545P	70.0	-5(23)	45	Medium viscosity, high Fluorine.	
KR 565P	70.0	-5(23)	65	High viscosity, high Fluorine terpolymer.	Best for extrusion. High elongation at break. Good bonding to other rubber substrates.
KR 525LP	70.0	-5(23)	25	Low viscosity, high Fluorine terpolymer with linear structure.	
KR 527LP	70.4	-6(21)	25	Low viscosity, high Fluorine terpolymer with linear structure.	Extrusion, suitable in fuel hose and EGR lines, excellent E20 resistance.

Our Peroxide curable raw gum offers improved chemical resistance in a wide range of fluids, including acids, water and steam.

Features

- Good chemical resistance
- Good mold release
- Good extrusion behaviour
- Good compression set
- Good steam resistance

PEROXIDE CURABLE LOW TEMPERATURE

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Product Description	Remarks
	Internal NMR	ASTM D 1329	ASTM D 1646		
KR 621PLT	64.0	-30(-22)	20	Excellent low temperature properties (TR 10 = -30°C) with reduced mold fouling and improved compression set and good mold release with fast cure.	Injection molding of O-rings, seals and gaskets. Extruded profiles.
KR 651PLT	64.0	-30(-22)	50		Injection, compression transfer, molding for shaft seals, O-rings, gaskets.

Our Peroxide curable low temperature raw gums provide the improved chemical resistance of standard peroxide curable grades, combined with improved low-temperature flexibility.

Features

- Good chemical resistance
- Good mold release
- Good extrusion behaviour
- Good compression set
- Improved low temperature resistance (TR 10 = -30°C)

RESEARCH & DEVELOPMENT

GFRC

Gujarat Fluoropolymers Research Centre (GFRC) located at Dahej, India, is at the forefront of product and application development activities and serves as an essential bridge between market requirements and manufacturing operations. It focuses on offering genuine expertise and prompt customer support on our products.

GFRC, a team of research scientists and product specialists, is equipped with state-of-the-art application development laboratory including DCS operated pilot reactors. It has collaborated with renowned research institutes globally to work on the areas of new product development and sustainable manufacturing technologies. With this, the centre focuses on delivering customised Fluoropolymer products for novel applications and on developing manufacturing technologies, which have minimal impact on the environment, thereby ensuring a sustainable future for the next generation.

CORE FUNCTIONS OF GFRC

Customer Support	Production Support	Quality Support
Technical Service	Product Development	Functional Testing
Records and Citations	Process Optimisation	Certifications and Regulatory Compliances
Pre-sales Documentation	Analytical Support	Statistical Analysis and Control
Development of Processing Guidelines		Customer On-site Audits
Application Development		Customer Feedback Analysis
Product Literature		Compliance to Quality Agreements

REGULATORY COMPLIANCE

GFL is committed to “Green Chemistry” and offers environment-friendly products using sustainable technologies. Our extensive research and development in the field of Fluoropolymers enable us to comply with all major global regulations and facilitate our customers to choose greener products manufactured by sustainable technologies.



REACH - Registration, Evaluation,
Authorization and Restriction
of Chemicals



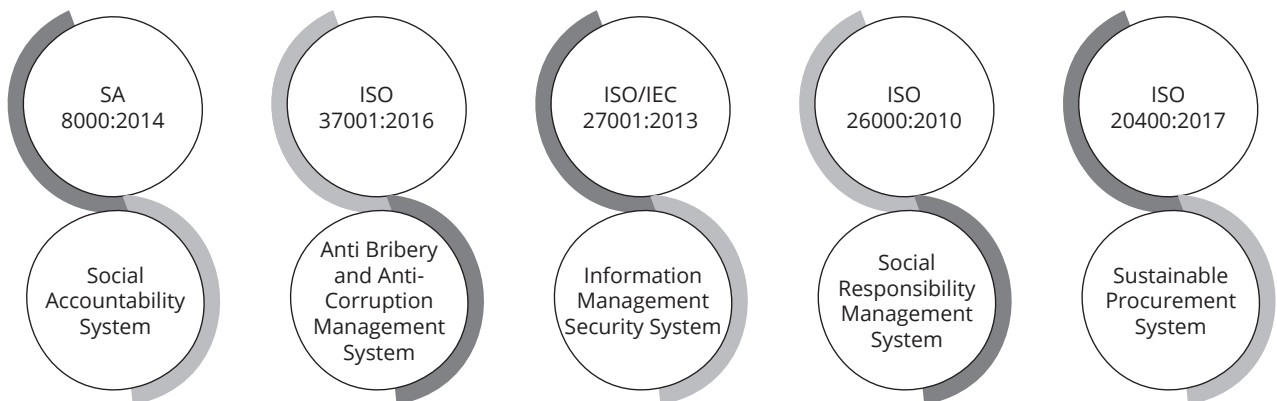
ROHS - Restriction of
Hazardous Substances



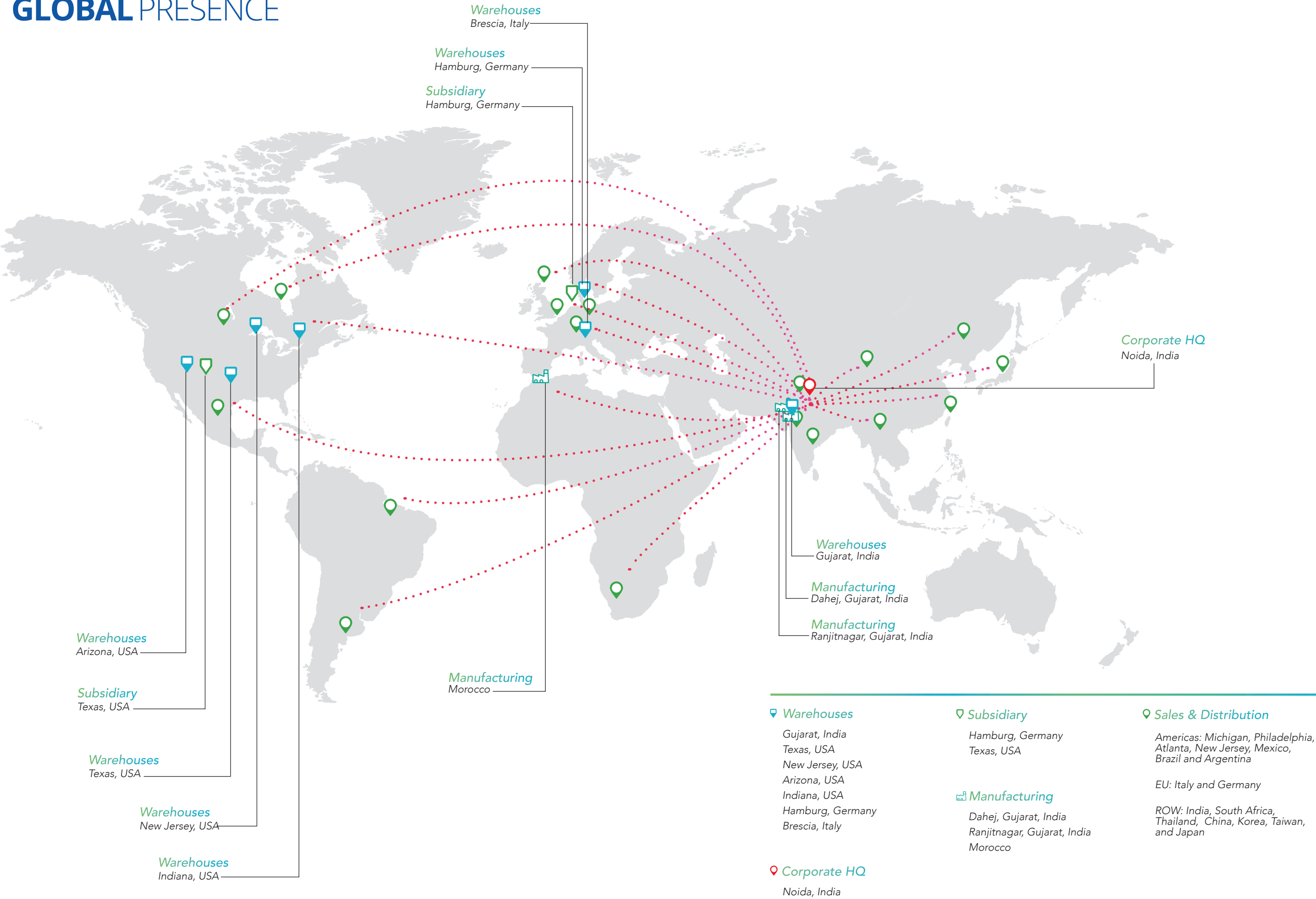
SVHC - Substances of Very
High Concern

SUSTAINABILITY

GFL is committed to social, environmental and economic sustainability through responsible processes, practices and greener initiatives not only in our products but also in our principles. While consistent operating results and strong financial performance are a business imperative, pursuing success while keeping health and safety paramount, remains one of our enduring values. The Company measures the impact of its business operations through the 3 key pillars of sustainability, namely People, Planet & Profit.



GLOBAL PRESENCE





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