INOX GFL GROUP

BEYOND INFINITY

FLUONOX®

FFKM

Built to last through every

CHALLENGE

GFL®

GUJARAT FLUOROCHEMICALS

VALUE THROUGH GREEN CHEMISTRY

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 specialities, 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 Morrocco, 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 Fluorospecialities markets globally.

FLUONOX® FFKM

Fluonox® FFKM are high performance-grade perfluoroelastomers developed to deliver outstanding resistance to both extreme temperatures and aggressive chemicals. Engineered for durability, they ensure reliable sealing performance in the most challenging industrial settings while maintaining excellent compression set properties.

These high-performance materials operate effectively across a broad temperature spectrum, from –10°C to 250°C and exhibit exceptional resistance to a wide array of harsh substances, including organic as well as inorganic acids, caustic, ketones, aldehydes, esters, ethers, alcohols, fuels, solvents, sour gases, hydrocarbons, steam, hot water, ethylene and propylene oxide and mixed process streams.

These perfluoroelastomers are highly suitable for fabrication of sealing solutions such as O-rings, gaskets, valve seals, butterfly valve components, pump housings, stators, bonded metal parts, diaphragms, and custom profiles. These components are essential in mechanical seals, pumps, compressors, valves, reactors, mixers, sprayers, dispensers, quick-connect couplings, control systems and instrumentation across diverse industrial applications. They can withstand extrusion and rapid gas decompression (RGD), particularly in the Oil and Gas industry. These grades can perform reliably in systems such as pumps, scrubbers, filters and chemical delivery units.

Fluonox® FFKM are compatible with standard peroxide curing systems and compounding agents, and can be processed using conventional equipment like two-roll mills and internal mixers. Its versatility allows for a wide range of manufacturing techniques to produce final components.

PROPERTIES

Our Fluonox® FFKM high performance grades - FFR35PC and FFR75PC are developed to deliver outstanding resistance to both extreme temperatures (up to 250 °C) and aggressive chemicals.

Physical Properties

Properties	Test Method	Unit	Grade	
			FFR35PC	FFR75PC
Appearance		-	Translucent Slab	Translucent Slab
Specific gravity at 23°C (73°F)	ASTM D792	g/cm³	1.99	1.99
Mooney viscosity ML (1+10) at 121°C (250°F)	ASTM D1646	MU	35	75
Shelf stability at room temp.			Excellent	Excellent
Fluorine Content	Internal NMR	%	72.3	72.3
Compression Set (70 h at 200°C)	ASTM D395 Method B	%	24	22
TR 10	ASTM D1329	°C	-2	-2

Chemical Properties

Fluid	Test Condition	Grade	
		FFR35PC	FFR75PC
Acetonitrile	168h × 23°C	A+	A+
Methyl Ethyl Ketone (MEK)	168h × 23°C	A+	A+
Ethyl acetate	168h × 23°C	A	A
Sulfuric acid (H_2SO_4), 98%	70h × 60°C	A+	A+
Ammonia, 28% solution	72h × 70°C	A+	A+
Toluene	168h × 70°C	B	B
Nitric acid (HNO_3)	168h × 80°C	A	A
Ethylenediamine	72h × 100°C	C	B
Diethanolamine	72h × 100°C	A+	A+
Glacial acetic acid	336h × 100°C	B	B
Diethanolamine	72h × 150°C	A	B
Diethanolamine	168h × 150°C	B	B
Dimethylformamide	168h × 150°C	A	A
1, 2-Dichlorobenzene	168h × 180°C	B	B

A+: < 2% **A: 2%-5%** **B: 5% - 10%** **C: >10%**

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.

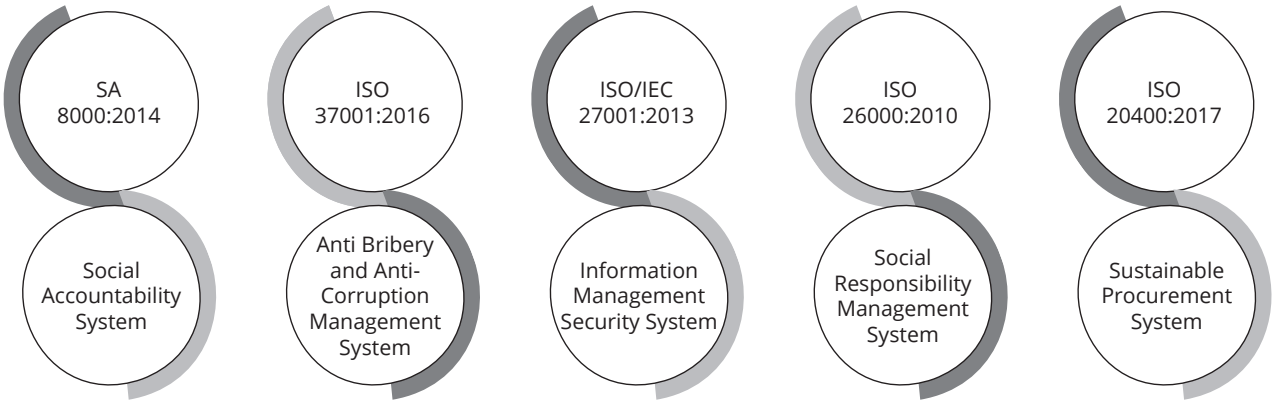
REACH - Registration, Evaluation, Authorization and Restriction of Chemicals

ROHS - Restriction of Hazardous Substances

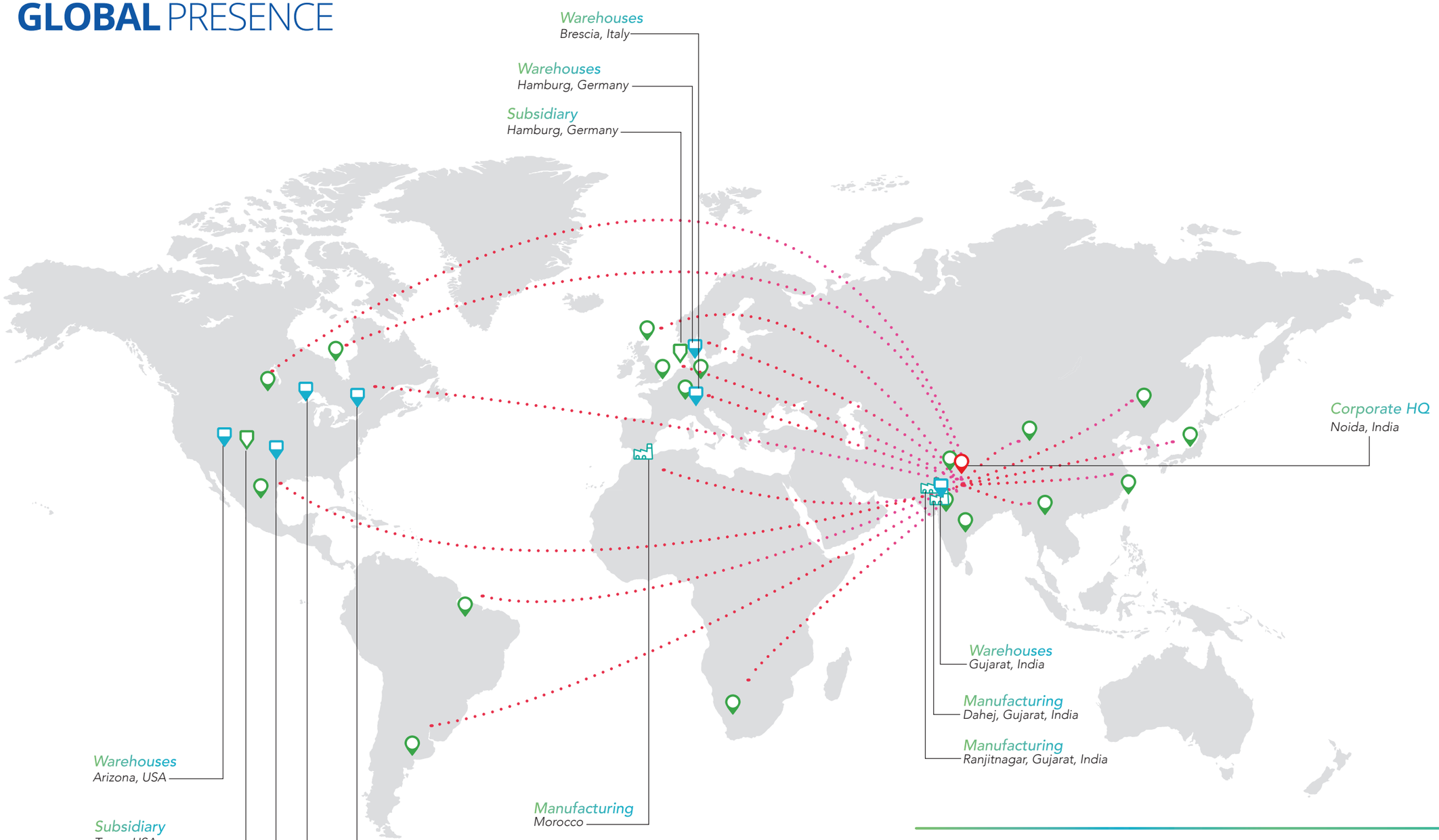
SVHC - Substances of Very High Concern

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



Warehouses

Gujarat, India
Texas, USA
New Jersey, USA
Arizona, USA
Indiana, USA
Hamburg, Germany
Brescia, Italy

Subsidiary

Hamburg, Germany
Texas, USA

Manufacturing

Dahej, Gujarat, India
Ranjitnagar, Gujarat, India
Morocco

Corporate HQ

Noida, India

Sales & Distribution

Americas: Michigan, Philadelphia, Atlanta, New Jersey, Mexico, Brazil and Argentina

EU: Italy and Germany

ROW: India, South Africa, Thailand, China, Korea, Taiwan, and Japan

GUJARAT FLUOROCHEMICALS

VALUE THROUGH GREEN CHEMISTRY

Headquarter

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