# Gulfstream Chemicals, LLC

## A Chemical Trading Company

We provide sustainable solutions for the global chemical market

## OUR LEADERSHIP

Our team of chemical industry veterans has close cooperative ties with many major chemical suppliers from around the world.

As a result, we have access to foreign research and development trends and developments in different markets through these relations.

#### **CEO**

Michael Politopoulos

Has over 25 years of production experience for diverse industries, including SpaceX, Johnson & Johnson, and countless influential chemical companies in the United States. He is a graduate of Columbia University, USA.

#### **PRESIDENT**

Dr. Serji Amirkhanian, Ph.D..

Has been working with polymers since 1987 globally. He has conducted consulting work for the World Bank, the UN, BMW, Michelin, and many more. In addition, he was a professor of Civil Engineering and had academic assignments internationally.

#### VP MARKETING/ LOGISITICS

Tigran Makarian

Has over 25 years of experience marketing various materials, has been involved with many business start-ups, and has extensive experience importing and exporting goods worldwide managing customs-related issues and solving complex logistical matters.

### VP MARKETING (GCC / AFRICA REGION)

Dr. Adam Mohamed, Ph.D..

Has over 30 years of management and marketing experience in the global marketplace. In addition, he has extensive experience working in the Middle East and Africa in distinct industries. He is a graduate of Ph.D., at Columbia University, USA.

## OUR Mission

To serve to expedite your needs for special chemicals for your business.

## OUR VISION

To provide the most dependable customer service in the industry for your success is our passion.

## OUR VALUES

Integrity, Innovation, Service, and Community

### INDUSTRIES WE SERVICE

Likelihoods are, you use a product that comprises of materials produced by Gulfstream Chemicals.

Our products serve as raw materials that enhance the quality and performance of many products people use in their everyday lives.

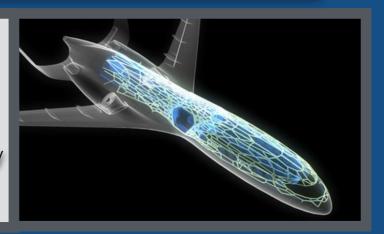
#### **Adhesives**

Gulfstream specialty additives are used widely by the adhesives industry.



#### **Aerospace**

Gulfstream monomers are key building blocks for polyimide resins for carbon fiber composites which are extensively used by the aerospace industry.



#### **Pharma**

Gulfstream can perform multistep synthesis of complex, high purity API precursors, which are used for further pharmaceutical synthesis.



#### Coatings

Gulfstream Polyamide-imide (PAI) Resins are thermoset ultra-polymers that are robust, chemical resistant, and thermally stable.



## INDUSTRIES WE SERVICE

One of many services we provide is to produce and customize any special chemicals to satisfy your company's needs.

- We have the ability to fulfill high volume orders and long-term contracts.
- We have the capabilities and technical resources of laboratories to develop your special chemicals.
- We have produced special chemicals for companies such as SpaceX, Michelin, BMW, and many more.

#### **Detergents**

Gulfstream fatty acid chlorides are used as starting materials by the North American detergents industry.



#### **Paints**

A number of Gulfstream monomers and corrosion inhibitors are used by the paints and coatings industry.



#### **Batteries**

Gulfstream ConSeal battery sealants reduce electrolyte leakage in dry cell batteries.



#### Rubber

Gulfstream is a global supplier of accelerators, crosslinkers, and antioxidants to the rubber and tire industry.



## OUR PRODUCTS

# We Are A Leading Supplier of A Wide Array of Basic Building Block Chemicals

Organic Intermediates

Commercial Monomers and Additives

Specialty Polymers

**PAI Products** 

Polyamide-Imide (PAI) Resins

Water Dilutable PAI Systems

OTHER POLYMERS RELATED

ASPHALT / ADDITIVES

PORTLAND CEMENT / CONCRETE / ADDITIVES

### Organic Intermediates Commercial Monomers and Additives | Specialty Polymers

PRODUCT	CHEMICAL NAME	CAS NUMBER	USE	
AA	Ammonium Adipate	[19090-60-9]	Coatings Additive	
AB	Ammonium Benzoate	[1863-63-4]	Paint additive, Electric capacitor ingredient,	
ACD	Ammonium Citrate Dibasic	[3012-65-5]		
ACT	Ammonium Citrate Tribasic	[3458-72-8]		
AS	Ammonium Succinate	[15574-09-1]	Perfume esters, lacquers, chemical intermediate	
APH	Acetyl Phenyl Hydrazine	[114-83-0]	Adhesives	
BMDB	4-Bromo-1,2- methylenedioxybenzene	[2635-13-4]	Pharmaceutical Intermediate	
BOSA	Butyl Octyl Salicylate	[190085-41-7]	Cosmetics, sunscreens	
C-22	3.3',5.5'-Tetra-tert-butyl-(1,1'- Biphenyl)-2,2'-diol	[6390-69-8]		
CAC	Cocoyl Chloride	[112-16-3]		
DEM	Diethyl Maleate	[141-05-9]		
DPA	Diphenolic Acid	[126-00-1]		
DPD	N.N-Diethyl-p- phenylenediamine	[93-05-0]		
EFC	Ferric Chloride Electronic Grade (Iron III Chloride)	[7705-08-0]	Pigments-Electronics- Pharma	
GP-203	N,N'-m-Phenylene bismaleamic acid	[13161-99-4]	Rubber Vulcanizing agent	
GP-204	N,N'-m-Phenylene bismaleimide	[3006-93-7]	Rubber Vulcanizing agent and Adhesives additive	
GP-205	Methylene Dianiline bismaleimide	[13676-54-5	Printed Circuit boards, Rubber, Aerospace	
GP-206A	Bisphenol-A Diallyl Ether	[3739-67-1]	Aerospace, Adhesives,Polyimide resins	
GP-206 (DABA)	Di-o-allyl Bisphenol-A	[1745-89-7]	Aerospace Materials, Polyimide resins	
GP-207	2.2.4 Trimethyl Hexamethylene Bismaleimide	[39979-46-9]	Aerospace Materials, Polyimide resins	

GP-207R	Hexamethylene Bismaleimide	[4856-87-5]	Aerospace Materials,polyimide resins	
GP-208	Toluene-2,4- Bismaleimide	[6422-83-9]	Aerospace Materials, polyimide resins	
GP-210	Hexamethylene Diamine Carbamate	[143-06-6]	Rubber Vulcanizing agent – fluoroelastomers	
GP-212	2-Aminoethyl Carbamic Acid	[109-58-0]	Rubber Vulcanizing agent – fluoroelastomers	
GP-213	Dicinnamylidene hexamethylene diamine	[140-73-8]	Rubber Vulcanizing agent – fluoroelastomers	
GP-214	Methylene biscyclohexylamine Carbamate	[13253-82-2]	Rubber Vulcanizing agent – fluoroelastomers	
GP-220	Heptaldehyde/Aniline Condensation Product	[9003-50-3]	High Temp. fast curing Rubber Accelerator	
GP-221	Pyridine, 3.5-diethyl-1,2- dihydro-1-phenyl-2-propyl- (PDHP)	[34562-31-7]	Adhesives' Activator	
GP-222	Pentachlorothiophenol Zinc Salt	[117-97-5]	Rubber Additive	
BT-CURE	Boron Trichloride – Dimethyloctanamine adduct	[34762-90-8]	Acrylic Adhesives, Epoxy Resins	
GP-404	MDI-2,6-Dimethyl Nitroso Phenol Adduct	[84030-01-3]	Polyurethanes (golf balls)	
GP-701	Carbohydrazide	[497-18-7]	Oxygen Scavenger	
DPS-BMI	N,N'-Diphenylsulfone-4,4'- Bismaleimide	[13102-25-5]	Carbon Fiber Composites	
LAC	Lauryl Chloride	[112-16-3]		
MA	Maleic Acid	[110-16-7]	Adhesives, Descaling	
MAPU	2-Methacryloxyethyl Phenyl Urethane	[51727-47-0]	Adhesives	
MDSA	5,5'-Methylenedisalicylic acid	[122-25-8]		
NHS	N-Hydroxysuccinimide	[6066-82-6]		
OAC	Oleoyl Chloride	[112-77-6]		
PA-70	Phosphorous Acid 70% solution	[13598-36-2]	Phosphonates	
PAC	Palmitoyl Chloride	[112-67-4]		

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# Organic Intermediates Commercial Monomers and Additives | Specialty Polymers Continued

PHPM	3-Phenoxy-2-hydroxypropyl Methacrylate	[16926-87-7]	Adhesives	
PHOS-5	Zinc-O,O-Dibutyl Phosphorodithioate			
SAC	Saccharin [Free Acid]	[81-07-2]	adhesives' activator	
VAC-11	Pentaerythritol-bis- tetrahydrobenzaldehyde acetal	[6600-31-3]	anti-ozonant for rubber	
ZIBEN	Zinc Benzoate	Zinc Benzoate [553-72-0] PVC Sta		
ZINCAD	Zinc Adipate	[3446-35-3]	Rubber additive	
ZINCAMINE	Zinc Dicyanatodiamine	[122012-52-6	Rubber Vulcanizing Agent – EPDM	

PRODUCT	CHEMICAL NAME	CAS NUMBER	USE	
SR3602-35W	Polyamide-Imide Resin Solution			
SR3602-37W	Polyamide-Imide Resin Solution		Dry Film Lubricant Binder, Industrial Non- stick Coating	
SR3603-30	Polyamide-Imide Resin Solution		Aerospace, Electronics,	
SR3604-35	Polyamide-Imide Resin Solution			
SR3602-28	Polyamide-Imide Resin Solution		Non-stick Cookware / Housewares	
Isocoat 401	Polyamide-Imide Resin Solution		Non-stick Cookware / Housewares	
Conseal 1400	Polyamide Resin Solution			
Conseal 1450	Polyamide Resin Solution	Dry Cell Battery Sealant		
Conseal 250	Polyamide Resin Solution		Dry Cell Battery Sealant	
Conseal 255	Polyamide Resin Solution		Dry Cell Battery Sealant	
Conseal FN120	Polyamide Resin Solution		Dry Cell Battery Sealant	
Conseal FN1200B	Polyamide Resin Solution		Dry Cell Battery Sealant	

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### PAI Products Polyamíde-Imíde (PAI) Resins Water | Dilutable PAI Systems

PRODUCT	DESCRIPTION	NON-VOLATILES (%)	VISCOSITY @ 23°C	DENSITY @ 23°C	FDA 177.2450 & 175.300	NOTABLE CHARACTERISTICS	TYPICAL APPLICATION
SR3602-35W	PAI in NMP	35-37	2,750-3,750 mPas	1.1	✓	Final polymer after curing exhibits high temperature resistance (up to 250° C), good chemical resistance, corrosive resistance and low friction.  Narrow viscosity range. High solids.	Dry Film Lubricant Binder, Industrial Non- stick Coating
SR3602-37W	PAI in NMP	34-36	4,000-6,000 mPas	1.1	1	Used in similar application to SR3602-35W, higher viscosity range.	Dry Film Lubricant Binder, Industrial Non- stick Coating
SR3603-30	PAI in NMP / Xylene	28-30	400-700 mPas	1.1	✓	Final polymer after curing exhibits high temperature resistance (up to 250° C), good chemical resistance, corrosive resistance and low friction.  Sprayable viscosity.	Aerospace, Electronics, Sprayable System, Impregnation
SR3604-35	PAI in NEP	35-37	2,800-3,600 mPas	1.1	4	High temp coating and as binder for graphite / PTFE e.g. non-stick cookware. High solids.	Housewares / Cookware, Industrial Non-stick Coatings, Dry Film Lubricant Binder, Internal Can Coating

NMP- N-methyl pyrrolidon
NFP - N-ethyl pyrrolidone

PRODUCT	DESCRIPTION	NON-VOLATILES (%)	VISCOSITY @ 23°C	DENSITY @ 23°C	FDA 177.2450 & 175.300	NOTABLE CHARACTERISTICS	TYPICAL APPLICATION
SR3602-28	PAI diluted in NMP / Water	27-29	5,000-7,500 mPas	1.05	<b>√</b>	Water and NMP reducible system. Polymer backbone exhibits good chemical resistance and excellent thermal stability. Cost effective. Can be used when working towards reducing VOC's.	Cookware / Housewares
IsoCoat 401	PAI diluted in NMP / Water	28-30	8,000-11,000 mPas	1.05	✓	Water and NMP reducible system. Polymer backbone exhibits good chemical resistance and excellent thermal stability. Cost effective. Can be used when working towards reducing VOC's.	Cookware / Housewares

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## OTHER POLYMERS RELATED ASPHALT / ADDITIVES

- PG Grade Related Polymers
- Crumb Rubber Polymers
- Warm Mix Asphalt Additives

- Anti-stripping Additives
- Colored Asphalt Polymers
- Fiber ReinforcementPolymerizations
- Polymers Many other polymers

# OTHER POLYMERS RELATED PORTLAND CEMENT / CONCRETE / ADDITIVES

- Cement Admixtures
- PCC Admixtures
- Reinforcement Materials
- Adhesive Polymers

- Nano-Technology Related Polymers
- Oil Industry Polymers
- Auto Industry Polymers
- Tire ManufacturingIndustry

## Our Key Raw Materials

- Boron Trichloride
- Phosphorus Trichloride
- Carbon Disulfide
- Dimethylamine
- Trimethyl Aluminum
- Thionyl chloride
- Diisocyanates
- Isocyanates
- Aluminum Chloride
- Benzoic Acid

- Anhydrous Ammonia
- Phenol
- Silicone Fluids
- Hydrazine
- Cyanuric Chloride
- Styrene
- Acrylamide
- Trimellitic Anhydride
- Methylene diphenyl diisocyanate (MDI)

## Our Chemical Competencies

- Acyl Halides (Acid Chlorides)
- Acrylic and Methacrylic
  - **Polymers**
- Claisen Rearrangements
- Esterifications
- Substitution Reactions
- Emulsion Polymerizations
- Nucleophilic Additions
- Aldol Condensations
- Acetal Formations
- Cycloadditions
- Substituted Urea Formations

- Urethanes
- Organosilicon Chemistry
- Hydrazine Chemistry
- Sigmatropic Rearrangements
- Williamson Synthesis of Ethers
- Radical Polymerizations
- Epoxide Chemistry
- Wittig Reactions
- Rubber Additives
- Imidizations
- Azide Reactions
- Tetrazole Formations

## CONTACTUS



Will ship chemicals either produced by us or from our chemical producer partners anywhere in the world.

We can support all your import and export customs-related issues and assist with your logistical needs by Rail, Air, Sea, and Truck.

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