

# GEMSTONE

GROUP FZE LLC

a future with a history

جيمستون جروب  
مرسرا



## Company profile

[WWW.GPPETRO.COM](http://WWW.GPPETRO.COM) [WWW.REEDOL.COM](http://WWW.REEDOL.COM)



# About us



Gemstone operates on a global scale, serving industrial companies mostly in Egypt & middle east

Our customers represent a large spectrum of sectors and different polymer applications.

Our main strategic goal is to always be one step ahead in terms of customer preferences. Today, we align our sales, logistics and IT capabilities to do this, offering a set of innovative solutions and services focusing on customer needs. and providing purchasing assistance, information and control.



# Our Mission and Vision

## MISSION

### ACCOUNTABILITY

To take responsibility for our work and actions, and deliver on our commitments to the business partners and the communities we serve

## VISION

Our vision is to become the indispensable link to achieve efficient polymer distribution. We firmly believe that offering the most convenient, efficient and competitive services to our customers, is the best way for that vision to become reality.





# Petroleum Trading





## EN590

D2 is a refinery abbreviation for Gasoil. It is the second distillate from the crude oil, and can be used without reformers and additives. Diesel's "flash point" changes in the winter. It also has additives to absorb water that condense. ISO has a standard for D2 that most of oil companies use as their reference. In the U.S. it is ANSI that has defined the US national standard for D2, according to proposals from the ASTM, API and EPA. In Europe there are similar national variants, e.g. in Germany set by DIN, and in Russia by GOST.

## Jet Fuel KEROSENE

Jet Fuel, or Aviation Turbine Fuel (ATF), or Kerosene is a type of fuel designed for use in aircraft that powered by gas-turbine engines. It is clear to straw-colored in appearance. The most commonly used fuels for commercial aviation are: Jet A and Jet A-1 which are produced to a standardized international specifications. The only other jet fuel commonly used in civilian turbine-engine powered aviation is Jet B which is used for its enhanced cold-weather performance.

## CRUDE OIL

Crude oil is a naturally occurring, unrefined petroleum product composed of hydrocarbon deposits and other organic materials. Crude oil can be refined to produce usable products such as gasoline, diesel and various forms of petrochemicals. As a type of fossil fuel, it's a nonrenewable resource, which means that it can't be replaced naturally.



## **Petrol Gasoline**

Gasoline or Petrol is a slice of oil fermented between 70 to 175 degrees which accounts for about 15 % of crude oil, is used in combustion engines. This fuel was first called "Benzene" in Germany, this name comes from the benzene chemical material. In many countries and languages, it's also called Benzene or very similar to Benzene.

## **Base Oil**

Base oils are used to manufacture products including lubricating greases, motor oil and metal processing fluids. Different products require different compositions and properties of the oil. At present, base oils are divided into two main groups of: mineral base oils and synthetic base oils, from the origin of the production.

**MINERAL BASE OILS:** Mineral base oils are obtained from a crude oil refining slurry and produced at three levels of quality (I, II & III) using various technologies.

**SYNTHETIC OILS:** Synthetic oils are produced by chemical methods. The most important synthetic base oils are: poly alpha olefins, esters.

## **BITUMEN**

Bitumen or Asphalt is a sticky, black, and highly viscous liquid or semi-solid form of petroleum. It may be found in natural deposits or may be a refined product. The primary use (70%) is in road construction, where it is used as the glue or binder mixed with aggregate particles to create asphalt concrete. Its other main uses are for bituminous waterproofing products, including production of roofing felt and for sealing flat roofs. The Sumerians, the Assyrians, and many early civilizations used bitumen widely. It was used as an anti-moisturizer, as well as for wood preservatives and for various items such as balms, sculptures and decorations.



# Our Products



## ONE-STOP INTEGRATED SOLUTION FOR ALL YOUR CHEMICALS REQUIREMENTS

- MARINE INDUSTRY CHEMICALS
- OILFIELD INDUSTRY CHEMICALS
- WATER TREATMENT CHEMICALS
- CLEANING INDUSTRY CHEMICALS
- FOOD & DAIRY INDUSTRY CHEMICALS
- LABORATORY CHEMICALS



# Our Products



- Di Water
- Mono Ethylene Glycol
- Isopropyl Alcohol 70% & 99%
- Chlorine Tablet
- Trichloroethylene
- Perchloroethylene
- Citric Acid Monohydrate
- Citric Acid Anhydrous Calcium Hypochlorite
- Rust and Scale Remover Sodium Silicate.
- Sodium silicate Neutral & Alkaline
- Caustic soda lye flakes prills
- STpp
- Citric acid
- Nitric Acid 67.5%
- Mono Ethanol Amine
- Silicagel - Blue, Orange White
- Hydrogen Peroxide 50%
- Tri Ethylene Glycol (TEG)
- Oxalic Acid Powder

- Xanthum Gum
- Gaur Gum (Industrial Grade)
- DI Water
- Activated Alumina
- Phosphoric acid
- Sodium sulphate
- Hydrate lime
- Polymer
- SLES SMBS
- Sodium bicarbonate
- Potassium silicate
- Soap noodles.
- Methanol
- IPA (Isopropyl alcohol)
- Ethanol
- Ferric chloride
- Potassium silicate
- Anthracite
- Molecular Sieves 13X
- Morpholine
- Formaldehyde

# Our Products



- DI Ethanol Amine
- Tri Sodium Phosphate
- Ammonia Solution Glycol (MEG)
- Degreaser HD
- Carbon Remover PAC
- Sodium Tripolyphosphate
- Degreaser Water Based
- Rust Remover
- Sea Cleaner Disc Cleaner

- Paint Remover
- Air Cooler Cleaner
- Tank Cleaner
- Fore & Aft Cleaner Metal Bright
- Sodium Hypochlorite
- Turbo cleaner
- Calcium Hypochlorite
- Ultra Sonic Cleaner
- Walnut Shell

## INDUSTRIES WE SERVE

INDUSTRIAL & CLEANING  
PAINTING INDUSTRY  
MINING & CONSTRUCTION  
OIL FIELDS  
WATER TREATMENT  
FOOD INDUSTRY  
POWER PLANT



# Polyolefins

Polyolefins are the largest group of thermoplastics, with the two most popular types being polypropylene and polyethylene, due to their wide variety of applications. Polyolefins are polymers formed from simple olefins such as ethylene, propylene, butenes, isoprenes or pentenes, or from copolymers and derivative modifications.



## LDPE

Low density polyethylene (LDPE) resins are used for a large number of high performance and general purpose applications. There are a great variety of specific grades for different transformation techniques.

## LLDPE - C4

There are several variations of linear low density polyethylene (LLDPE), from Octene C8, Hexene C6 and Butene C4, of varying densities: from high (up to 0.941 g/cm<sup>3</sup>) to very low (0.905 g/cm<sup>3</sup>). LLDPE is used for film extrusion, blow moulding, rotomoulding and injection moulding for packaging food, frozen food, radiation heating pipes and cosmetic and pharmaceutical applications.

## LLDPE - C6

There are several variations of linear low density polyethylene (LLDPE), from Octene C8, Hexene C6 and Butene C4, of varying densities: from high (up to 0.941 g/cm<sup>3</sup>) to very low (0.905 g/cm<sup>3</sup>). LLDPE is used for film extrusion, blow moulding, rotomoulding and injection moulding for packaging food, frozen food, radiation heating pipes and cosmetic and pharmaceutical applications.

## LLDPE - C8

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# Polyolefins



## EVA

EVA is an elastomer used to produce materials that look “rubbery” due to their softness and flexibility. The vinyl acetate content determines the degree of elasticity; it also has good transparency and gloss and resistance at low temperature to stress cracking and UV radiation. EVA has a slight characteristic odour of vinegar (acetic acid) and competes with rubber products, as well as with certain polymers in many electrical applications.

## PPC

Polypropylene copolymer (PPC) is a bit softer, but has better impact resistance, is stronger and more than polypropylene homopolymer (durable PPH). It tends to have a better resistance to stress cracking and a lower strength at temperature than the homopolymer, with other slight reductions in the performance of other properties.

## PPC RANDOM

Random PPC, unlike PPC, has the comonomer units arranged in irregular or random patterns along the polypropylene molecule. They are generally selected for applications where a more malleable and more transparent product is desired, although with less impact resistance than PPC.

## POES AND POPS

These are PP elastomers with a molecular structure of propylene and ethylene monomers integrated in the molecular chain having very diverse applications. The ethylene content determines the degree of elasticity and they have the advantage of being able to be mixed with PE and PP of all kinds.

## PP COMPOUNDS

Polypropylene compounds are thermoplastic resins produced using a mixture of one or more base polyolefins with various components, such as impact modifiers, fillers and strengtheners (e.g. mineral fillers and glass fibre), pigments and additives. These polypropylene compounds offer a wide range of features and are used in a wide variety of applications.

## PPH

Polypropylene is an economical material that offers a combination of excellent physical, mechanical, thermal and electrical properties not found in any other thermoplastic. Compared with low or high density polyethylene, it has lower impact resistance, but a higher temperature resistance and higher tensile strength. Polypropylene homopolymer (PPH) is the most used. It has a high strength/weight ratio and is more rigid than the copolymer. This, combined with good chemical resistance and weldability, means it is used in many corrosion resistant structures.





# Polyolefins

Polyolefins are the largest group of thermoplastics, with the two most popular types being polypropylene and polyethylene, due to their wide variety of applications. Polyolefins are polymers formed from simple olefins such as ethylene, propylene, butenes, isoprenes or pentenes, or from copolymers and derivative modifications.



## LLDPE - Rotomoulding

There are several variations of linear low density polyethylene (LLDPE), from Octene C8, Hexene C6 and Butene C4, of varying densities: from high (up to 0.941 g/cm<sup>3</sup>) to very low (0.905 g/cm<sup>3</sup>). LLDPE is used for film extrusion, blow moulding, rotomoulding and injection moulding for packaging food, frozen food, radiant heating pipes and cosmetic and pharmaceutical applications.

## ULDPE

Both ULDPE (ultra low density polyethylene) and VLDPE (very low density polyethylene) are basically LDPE with densities below 0.880 g/cm<sup>3</sup>. ULDPEs are mainly used as impact modifiers for other polyolefins.

## mPE

These polymers are high performance, new generation polyethylene (PE), also called Linear Metallocenes. They are used in a large number of film applications, such as packaging, agriculture, construction and building and industrial applications. They offer great performance, significantly improving the general properties of PE and providing added value to the product manufactured.

## MDPE

MDPE is a thermoplastic within the polyethylene family with a density of 0.926-0.940 g/cm<sup>3</sup>, which is less dense than the more common HDPE.

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## HDPE - Injection Moulding

A versatile thermoplastic polymer with a great cost/performance ratio. Its general hardness, flexibility and impact resistance at low temperatures make it ideal for consumer and industrial products. By complying with FDA regulations it is appropriate for food and medical applications.

## HDPE - Blow Moulding

HDPE resins are the choice for many applications due to their resistance to cracking, rigidity and ability to withstand high temperatures and deformation. They provide a great range of properties for almost any blow moulding process for hollow bodies.

## HDPE - Blow Film

HDPE resins are used in blown film applications where rigidity and low thickness are very important. The composition of HDPE offers optimum performance features for blown film processes.

## HDPE - Pipe

Notable mainly for its strength, low cost and impact resistance.



# Styrenics

Styrene polymers take styrene as a monomer. Polystyrene (PS) is the main polymer in this category by volume of consumption, followed by acrylonitrile butadiene styrene (ABS). Polystyrene properties make it ideal for a large number of applications in many industries, such as construction, packaging and consumer goods.



## GPSS

With its transparency Polystyrene provides relatively good strength and weatherability. It flows easily, making it suitable for use in moulding for the manufacture of products such as toys, CD-DVD cases and plastic cups. It has a clear, high gloss finish.

## HIPS

High impact polystyrene (HIPS) consists of clear PS and rubber which makes it opaque and white. It is a versatile, economical and impact resistant polymer that is easy to process. It is frequently used in the processing of semi-finished prototypes, as it has excellent dimensional stability and is easy to transform, paint and stick.

## MABS

Transparent ABS (M-ABS) provides excellent transparency as well as good mechanical properties. It is used in various applications requiring transparency like electronic devices, frames and panels, householding. Processing and moulding conditions are similar to ABS.

## SAN

Styrene acrylonitrile (SAN) has moderately low ductility compared with other thermoplastics, and is very commonly used instead of polystyrene due to its higher thermal resistance.

## ABS

Acrylonitrile Butadiene Styrene (ABS) is an amorphous Terpolymer with good strength and impact properties and allows processing to applications with glossy surface like automotive parts, toys, housing, household and consumer goods.

# Engineering polymers

Engineering polymers are a group of plastic materials that have improved mechanical and thermal properties that make them ideal for all types of engineering applications, replacing traditional materials equal or greater in weight, hardness or other properties, while being much simpler to manufacture, especially with complex shapes.



## BLENDS

A polymer mixture ("alloy") is the combination of two or more polymers that fuse to create a new material with different physical properties. Polymer blends are an effective method of developing new polymer-based materials for a wide range of applications. The key to their proper use is to adjust the properties of the new material by appropriate selection of the component polymers.

## PA 6

This semicrystalline thermoplastic is one of the most widely used engineering thermoplastics by providing well balanced properties in strength, stiffness and chemical resistance. It has improved surface appearance and processability compared to PA 66 but lower modulus and absorbs moisture more rapidly. PA 6 can be processed by extrusion (e.g. fibres, profiles) and injection.

## PC

Polycarbonate is a transparent thermoplastic with excellent impact resistance. Its high performance properties make it the leading plastic for various applications requiring high operating temperatures and safety features. Polycarbonates are unique in their working temperatures and in their ability to experience minimal degradation between heating and cooling points.

## POM C

POM C, also known as polyacetal copolymer or acetal resin, is a highly crystalline, and therefore strong and rigid, engineering plastic with a low coefficient of friction compared to metals and other plastics. It is also creep resistant and is recommended for applications where dimensional stability is important.

## PA 6.6

PA 6.6 offers an excellent balance of mechanical properties (strength, stiffness, impact) and heat / chemical resistance. Therefore PA 6.6 very often is considered as an outstanding candidate for metal replacement.

## PA COMPOUNDS

Polyamides (PA) can be modified with fillers, fibers, internal lubricants, impact modifiers etc. to improve mechanical properties, heat and chemical resistance or processability depending on the demand of end-use and application requirement.

## POM H

POM H has a higher mechanical strength, rigidity, hardness and creep resistance than POM C, and a lower coefficient of thermal expansion.

## PPS

PPS is a semicrystalline polymer offering excellent properties in high temperature and chemical resistance as well as dimensional stability. Because of its inherent flame retardancy PPS is often used for electrical applications requiring high temperature resistance. Due to its low viscosity PPS can be moulded even with high loading of fillers and reinforcements.



# Other polymers

Chemieuro can supply any type of polymer for your company. In this category, we will describe some other types we work with.



## ELASTOMERS

Elastomers are rubbery materials capable of recovering their original shape after significant stretching. Under normal conditions, the long molecules form an elastomer, and the material is arranged irregularly. However, after the application of force, the molecules straighten in the direction they are stretched in. After release, the molecules spontaneously return to their normal, compact, random arrangement.

## ADDITIVES

Additives are substances added to polymers to improve or modify their properties to adapt them to their intended application. The quantity and range of additives are as profuse as the applications required of them.





# Chemical Products





## OUR PRODUCTS LINE FOR HOME AND INDUSTRIAL CLEANING



- Acids
- Surfactants
- OleoChemicals
- Biocides
- NeutralizingAgents / pH Regulators
- ThickeningAgents
- WhiteningAgent&Activators
- PhosphateSalts
- Preservatives
- ChelatingAgent
- Enzymes
- Colorants&Fragrance
- Pigments
- RheologyModifier
- Opacifier



## Product Line –Homecare & Industrial Cleaning



### Acids

**BORIC ACID**  
**CITRIC ACID**  
**FORMIC ACID**  
**GLUCONICACID 50%**  
**GLYCOLIC ACID 70% E**  
**NITRIC ACID 60-62%**  
**OXALIC ACID TECH. GRADE**  
**PHOSPHORIC ACID**  
**PHOSPHORUS ACID 99%**  
**P-TOLUENESULFONICACID 65%**  
**SULFURICACID 98-99%**

### SURFACTANTS

**ALKYL POLYGLUCOSIDE**  
**ALPHA OLEFIN SULFONATE**  
**BKC 50% & 80%**  
**COCO MONOETHANOLAMIDE**  
**COCOAMIDO PROPYL BETAINE**  
**DDAC 80%**  
**LAURYL AMINE OXIDE**  
**SLES 28% & 70%**  
**SODIUM COCOYL GLYCINATE / ISETHIONATE**  
**SODIUM LAUROYL SARCOSINATE**  
**SODIUM LAURYL SULFATE**  
**SORBITOAN MONO LAURATE / OLEATE / STEARATE**

### Oleochemicals

**GLYCERINE 99.5%**  
**GLYCERYL MONOSTEARATE**  
**ISOPROPYL MYRISTATE**  
**ISOPROPYL PALMITATE**  
**LAURICACID**  
**MYRISTIC ACID**  
**NATURAL ALCOHOL**  
**OLEIC ACID**  
**PALMITIC ACID**  
**PALMITIC ACID**  
**SOAP NOODLES**  
**STEARIC ACID**



## Product Line –Homecare & Industrial Cleaning



### Biocides

Benzalkonium Chloride 50%

Benzalkonium Chloride 80%

Bronopol

CIT/MIT

DBNPA

Glutaraldehyde

### Phosphate Salt

Mono Sodium Phosphate

Sodium Tripoly Phosphate

TetrapotassiumPyrophosphat

TKPP Anhydrous

TKPP Sol 50%

TrisodiumPhosphate

### Chelating Agent

EDTA Disodium

EDTA Tetrasodium

GLDA

HEDP 60%

NTA Acid

NTA Trisodium



## Product Line –Homecare & Industrial Cleaning



### Preservative

Ethyl Paraben  
Methyl Paraben  
MIT  
Phenoxyethanol  
Proteases  
Propyl Paraben  
Sodium Benzoate

### Silicone Oils

Cyclopentasiloxane  
Cyclopentasiloxane & Dimethicone  
PDMS 35-120000cst

### Enzymes

Amylased  
Cellulases  
Lipases



## Product Line –Homecare & Industrial Cleaning



### WHITENING Agents & Activators

HYDROGEN PEROXIDE 30%  
HYDROGEN PEROXIDE 35%  
HYDROGEN PEROXIDE 50%  
SODIUM GLUCONATE  
SODIUM NONANOYLOXYBENZENESULFONATE (NOBS)  
SODIUM PERCABONATE  
TETRAACETYLETHYLENEDIAMINE(TAED)

### NEUTRALIZING AGENTS/ PH REGULATORS / Basic

AMMONIUM BICARBONATE  
CAUSTIC SODA FLAKES & SOL 50%  
CITRIC ACID  
LACTIC ACID  
POTASSIUM CARBONATE  
POTASSIUM HYDROXIDE FLAKES & SOLU 50%  
SODA ASH DENSE/ LIGHT  
SODIUM CARBONATE  
SODIUM METASILICATE  
Boric Acid

### Thickening Agents

AMINE OXIDES  
CARBOXYMETHYL CELLULOSE  
GUAR GUM  
HASE ACID/ACRYLATE COPOLYMER  
HYDROXYPROPYL METHYL CELLULOSE  
MONOETHANOLAMINESALT  
SODIUM CHLORIDE  
TRIETHANOLAMINE  
XANTHAMGUM





فخورين  
بالإمارات  
PROUD OF UAE

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