ALTech
Redefining ALPHA

PETROCHEMICALS

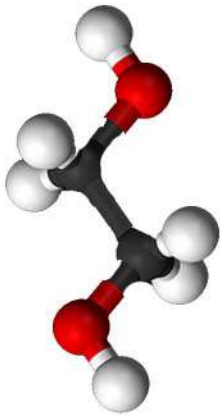
Liquid Petrochemicals

Monoethylene Glycol (MEG)

The product is used primarily as a raw material in the manufacture of polyester fibre and PET.

Examples of applications

Approximately 90% of the global consumption of monoethylene glycol is used mainly as a raw material in the manufacture of polyester fibre and PET. Polyester fibre is found primarily in textile products (sportswear, carpets, upholstery). Special types of polyester fibres are used in the automotive industry (seatbelts, airbags) and in the construction and transport sectors (ropes, tarpaulins). PET is best-known for its role in the manufacture of soft drink bottles.



Packaging

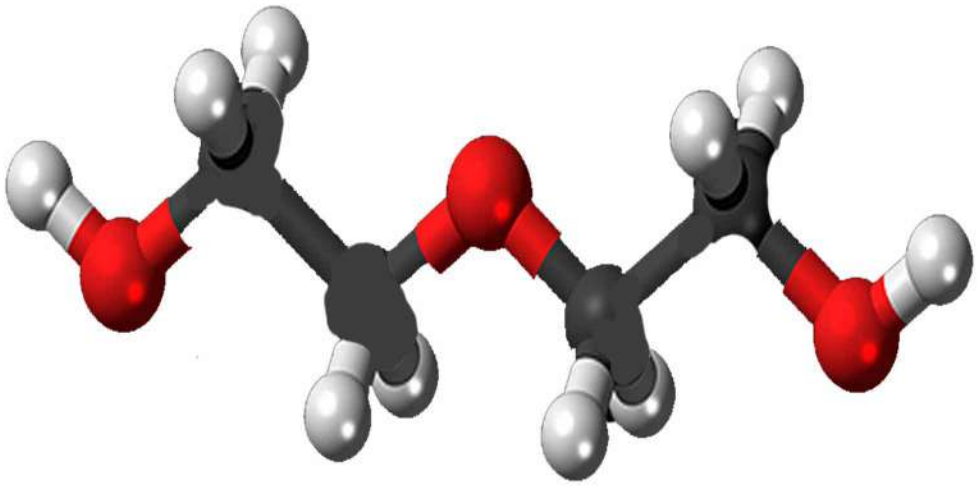
- Bulk in seagoing vessels / barges
- Bulk in rail tank cars
- Bulk in road tank cars
- Bulk in iso tank containers
- In drums or ibc

Other packaging solutions possible by agreement.

Liquid Petrochemicals

Diethylene Glycol (DEG)

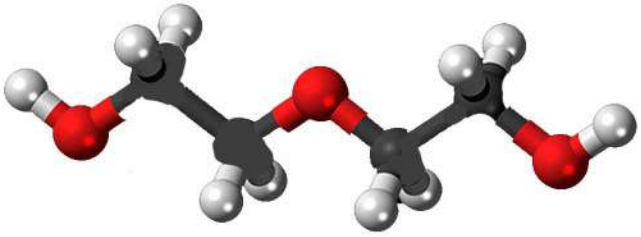
Diethylene Glycol (DEG) is primarily used as a feedstock in the manufacture of polyester resins, and it serves as a solvent in the production of industrial resins. Polyester resins are found mainly in textile products (sportswear, carpets, upholstery). Special types of fibres are also used in the automotive industry (seatbelts, airbags) and in the construction and transport sectors (ropes, tarpaulins).



Liquid Petrochemicals

Packaging

- Bulk in seagoing vessels / barges
- Bulk in rail tank cars
- Bulk in road tank cars
- Bulk in iso tank containers
- In drums or ibc

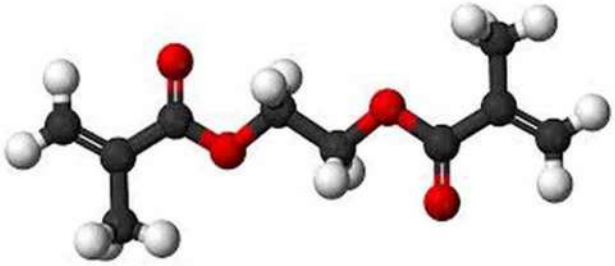


Triethylene Glycol

This product is used in gas dehydration and as a plasticizer for PVB film. Minor fields of application are fog fluids and odour neutralisers.

Packaging

- Bulk in seagoing vessels / barges
- Bulk in rail tank cars
- Bulk in road tank cars
- Bulk in iso tank containers
- In drums or ibc



Liquid Petrochemicals

Ethanol

Ethanol is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes, and is most commonly consumed as a popular recreational drug. It also has medical applications as an antiseptic and disinfectant.
The compound is widely used as a chemical solvent, either for scientific chemical testing or in synthesis of other organic compounds, and is a vital substance utilized across many different kinds of manufacturing industries. Ethanol is also used as a clean-burning fuel source.

Liquid Petrochemicals

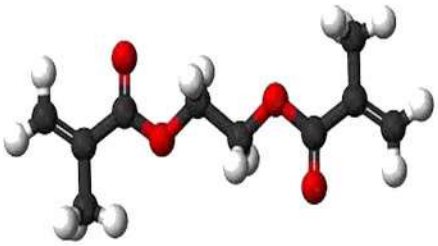
Methanol

Methanol is a basic component for the petrochemicals industry and is also increasingly being used in the energy sector.

Examples of applications

Methanol is a versatile feedstock for the chemicals industry.
The largest scale applications in terms of volume are processing into formaldehyde, which is further treated to form resins, glues and various plastics and for the production of acetic acid which is essentially used for the production of polyester fibres and PET plastics. In recent years, the significance of methanol as an energy source has consistently increased. In petrol, methanol increases the octane number either in the form of a direct additive or as a component of MTBE (methyl-tertiary-butyl-ether), improving combustion qualities and reducing emissions.

Packaging



Bulk in seagoing vessels / barges
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In drums or ibc

Other packaging solutions possible by agreement.

Liquid Petrochemicals

Polystyrene

The conventional process to produce styrene monomer is the alkylation of benzene with ethylene followed by a dehydrogenation (EBSM method). This “on-purpose” method represents approximately 70 % of the styrene monomer produced globally. Furthermore styrene is a co-product when producing propylene oxide (POSM method).

Examples of applications

The most important styrene derivative is polystyrene (PS), which is used in the production of cd boxes, food containers and drinking cups e.g. Another product made from styrene is the so called Expandable Polystyrene (EPS). It is used in fish boxes, home insulation, motorcycle and bicycle helmets for example. Further styrene monomer derivatives can be found in multiple products of our everyday use like car tyres, toys and automotive components.

Packaging

- Bulk in seagoing vessels / barges
- Bulk in rail tank cars
- Bulk in road tank cars
- Bulk in iso tank containers

Liquid Petrochemicals

Heavy Alkyl Benzene (HAB)

Heavy alkyl benzene (HAB) is a byproduct in the process of linear alkyl benzene (LAB) production. It is used as heat transfer oil and in lubricating greases.
the potential of the usage of HAB in the formulation of gasoline and diesel engine oils as well as hydraulic fluid. With the aim of passing 5W30, 5W40, 10W40, and 15W40 standards, different engine oils have been formulated.

The formulations contain various amounts of HAB as minor component, and miscellaneous quantities of solvent neutral 100 (SN-100), SN-150, and SN-650 as major component. The measurement of typical properties of obtained oils indicates that some of them do have the intended criteria.

Solid Petrochemicals

Urea

Urea is a white dry organic compound and a crystalline substance and has minimum of 46% nitrogen calculated in dry state.

Urea is made by reacting carbon dioxide (CO_2) with anhydrous ammonia (NH_3) under pressure of 3000 psi and temperatures of around 350 deg f.
Water is removed during processing and the molten matter is either converted to prills or into granules.

SHAPE OF UREA:

It is generally supplied in prills or crystals/grains. Although the colour of urea is white but the crystals are larger than prills.



PACKING OF UREA:

Commercial Urea is available in any desired packing. However it is generally packed in 50 kg bags or bulk/loose.

Prilled urea	Properties
Quality specifications:	white prilled
Mass part nitrogen	46.2%
Biuret, not more than	1.0%
Moisture not more than	0.5%
Granulometry: (granules size)	1mm to 4mm 90% min.
Free ammonia:	160 pxt ppm max.
Melting point:	32 degrees cen.

Solid Petrochemicals

Physical properties:

non radioactive, white, free flowing, free from harmful substances, 100% treated against caking

Granulated urea	Properties
Quality specifications	white granules
Nitrogen recalculated to dry	46.2%
Biuret, not more than	1.0%
Water, not more than	0.5%
Granulometry: (granules size)	2mm to 4mm 90% min.
Free ammonia:	160 pxt ppm max.
Melting point:	132 degrees cen.
Crumbliness	100%

Physical properties:

non radioactive, white, free flowing, free from harmful substances coated, spherical & uniform in size, 100% treated against caking

Solid Petrochemicals

PE WAX

Polyethylene Wax, also known as PE Wax, is an ultra low molecular weight polyethylene consisting of ethylene monomer chains. PE wax has a large variety of uses and applications. PE Wax is available from on-purpose production and as a byproduct of polyethylene production. This material is available in both HDPE and LDPE forms.

Properties of Polyethylene wax

Appearance: Hard, white, translucent, tasteless, non toxic, odourless.
Form: Polyethylene wax is available as pellets, powders or flakes.

Melting point: 97-115 deg.C
Specific gravity: 0.922

Other details:

Excellent stability against polishing, scratch resistance, metal mark resistance, scuff resistance

Polyethylene wax is resistant to water and chemical materials.

Solid Petrochemicals

Polystyrene

Polystyrene is a versatile plastic used to make a wide variety of consumer products. As a hard, solid plastic, it is often used in products that require clarity, such as food packaging and laboratory ware. When combined with various colorants, additives or other plastics, polystyrene is used to make appliances, electronics, automobile parts, toys, gardening pots and equipment and more.

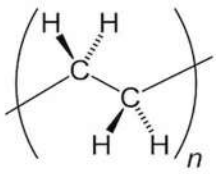
Polystyrene also is made into a foam material, called expanded polystyrene (EPS) or extruded polystyrene (XPS), which is valued for its insulating and cushioning properties. Foam polystyrene can be more than 95 percent air and is widely used to make home and appliance insulation, lightweight protective packaging, surfboards, foodservice and food packaging, automobile parts, roadway and roadbank stabilisation systems and more.

Polystyrene is made by stringing together, or polymerising, styrene, a building-block chemical used in the manufacture of many products. Styrene also occurs naturally in foods such as strawberries, cinnamon, coffee and beef.

Solid Petrochemicals

Polyethylene

Polyethylene (PE), light, versatile synthetic resin made from the polymerisation of ethylene. Polyethylene is a member of the important family of polyolefin resins. It is the most widely used plastic in the world, being made into products ranging from clear food wrap and shopping bags to detergent bottles and automobile fuel tanks. It can also be slit or spun into synthetic fibres or modified to take on the elastic properties of a rubber.



Polyethylene

Solid Petrochemicals

Polypropylene

PP, or Polypropylene: is a thermoplastic polymer used in a wide variety of applications including packaging and labeling, textiles (e.g., ropes, thermal underwear and carpets), stationery, plastic parts and reusable containers of various types, laboratory equipment, loudspeakers, automotive components, and polymer banknotes.

Polypropylene is mainly derived from the catalytic cracking of crude oil which results in propylene. This propylene is polymerised in a polymerisation plant to produce polypropylene through linking many propylene monomers into long chain polypropylene.

Melt processing of polypropylene can be achieved via extrusion and molding.
The most common shaping technique is injection molding, which is used for parts such as cups, cutlery, vials, caps, containers, housewares, and automotive parts.

Solid Petrochemicals

Polypropylene

The large number of end-use applications for polypropylene are often possible because of the ability to tailor grades with specific molecular properties and additives during its manufacture. For example, antistatic additives can be added to help polypropylene surfaces resist dust and dirt. Many physical finishing techniques can also be used on polypropylene, such as machining. Surface treatments can be applied to polypropylene parts in order to promote adhesion of printing ink and paints.

ALTech GROUP have a global footprint

- Sales Office and Registered Entity
- Sales Representation

- Manufacturing Plant
- Warehouse (upcoming)
- Warehouse

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www.altechgroup.net

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