Rayeneh Group
since 1999

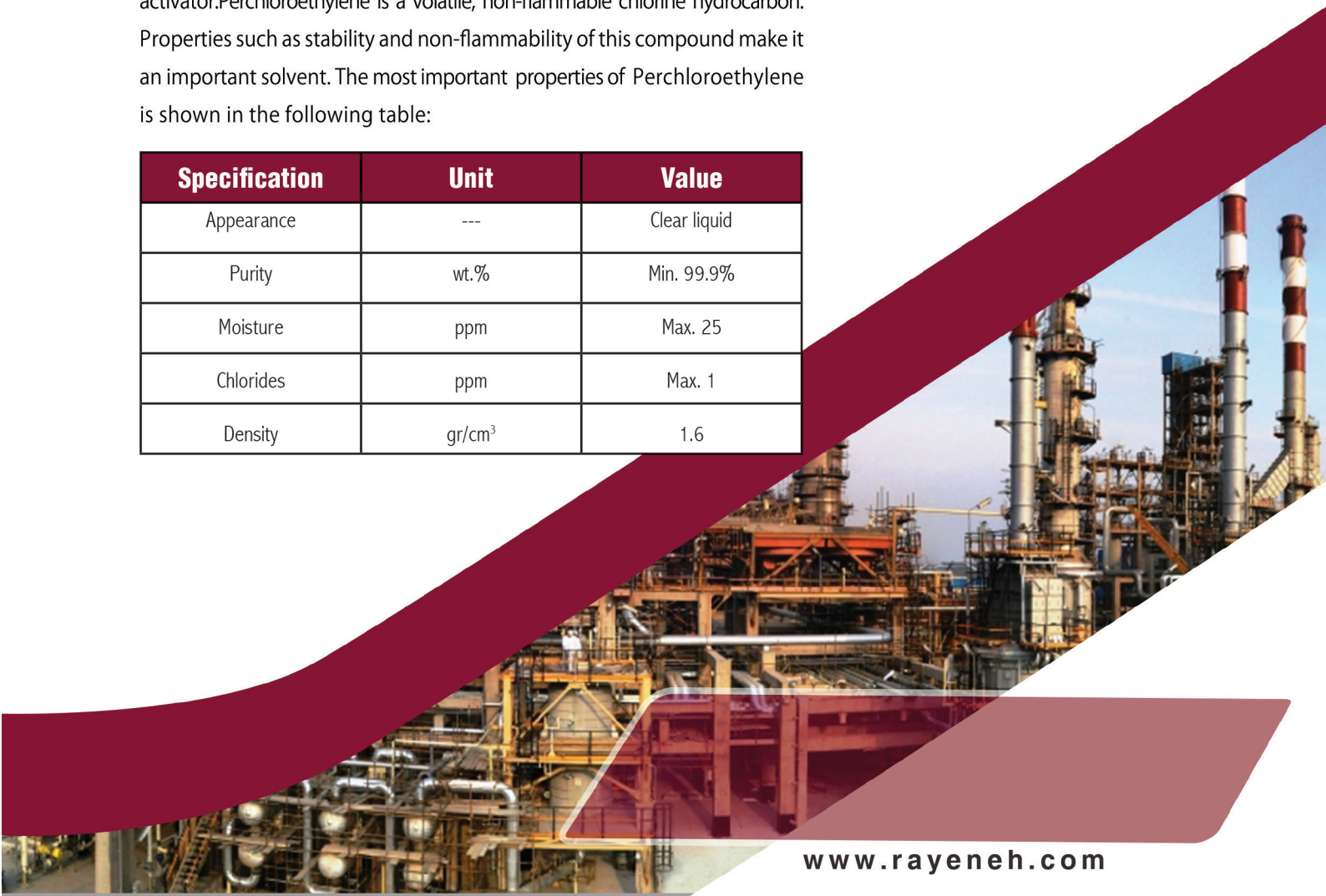
# Perchloroethylene ($C_2Cl_4$)

The conversion of a normal straight-chain alkane to an isomerized branched alkane significantly improves the properties of hydrocarbons, a process that takes place during an isomerization reaction. In industry, isomerization of straight-chain compounds is used to perform the following processes:

- Increase the octane number
- Achieve better diesel fuel performance
- Improving environmental properties and reducing the emission of fuel pollutants
- Production of base oils with high viscosity index during slack wax hydrogen isomerization process

Chloride solvents are used as a catalytic activator of the isomerization process to supply chlorine ions ( $Cl^-$ ). Perchloroethylene, also known as Tetrachloroethylene , ethylene tetrachloride and PCE, is used as one of the most important chlorinated compounds as an isomer unit catalyst activator.Perchloroethylene is a volatile, non-flammable chlorine hydrocarbon. Properties such as stability and non-flammability of this compound make it an important solvent. The most important properties of Perchloroethylene is shown in the following table:

| Specification | Unit | Value |
|---|---|---|
| Appearance | --- | Clear liquid |
| Purity | wt.% | Min. 99.9% |
| Moisture | ppm | Max. 25 |
| Chlorides | ppm | Max. 1 |
| Density | $gr/cm^3$ | 1.6 |



Rayeneh Group
since 1999

# Perchloroethylene ($C_2Cl_4$)

Rayeneh Group is a leading supplier of Perchloroethylene from the most reputable manufacturers with its key grades:

- Catalyst grade: used in refineries and petrochemical companies
- Perstabil grade: used for drycleaning

The catalyst grade of of Perchloroethylene is a well-known chloriding agent that generates a large amount of chloride ions ($Cl^-$) as an accelerator of catalyst activity and is used in refinery isomerization units. Among the various grades of Perchloroethylene , only one grade of this substance as a catalyst activator is approved by the strict rules of companies such as UOP.

Perchloroethylene catalyst grade supplied by Rayeneh Group has the following advantages:

- Reduces the amount of nitrogenous compounds in isomerization products to minimum.
- The high purity of Perchloroethylene and the presence of about 10 ppm of stabilizing agent leads to a decrease in the amount of oxygen to less than 0.5 ppm.
- Make higher efficiency in isomerization units.

## Who we are

*Rayeneh Group is an international supplier of chemicals, catalysts, and equipment in the Oil, Gas, Petrochemical, and Mine Industries. Since its establishment in 1999, Rayeneh Group has continuously strived to reach new markets while offering world class services. As of today, Rayeneh Group operate international offices in our territory with unique access to sources of high-quality chemicals, and is one of major players in the chemicals market. As dictated by our policy, "Serving Our Clients Beyond Their requirements " has always been at the forefront of our operations.*


4 th Floor, No. 23, Kavoosifar St,
Shahid Beheshti St, Tehran, Iran
159843711
+98 21 88549451-3
m.garakani@rayeneh.com
www.rayeneh.com
rayeneh.co