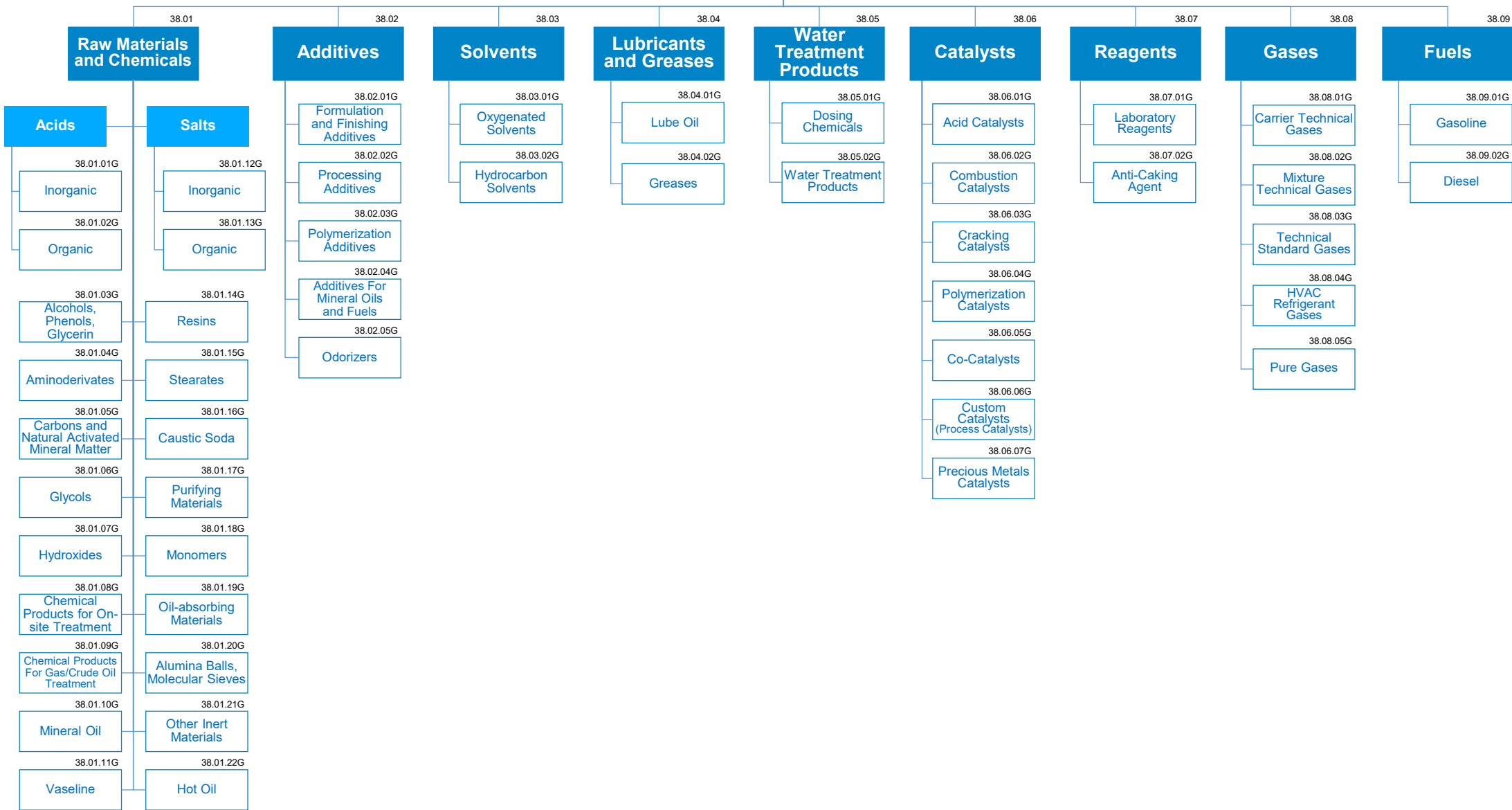


# Chemicals, Catalysts, Reagents and Fuels



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Chemicals, Catalysts, Reagents and Fuels are constantly used for the manufacturing, testing, commissioning, operations and maintenance of components, equipment, systems, and plants.

## MAIN RATIONALES BEHIND THE STANDARD CATEGORIZATION

### Raw Materials and Chemicals

- Inorganic acids, also called mineral acids, are acids derived from one or more inorganic compounds. These inorganic acids are either oxygenless or oxoacids. With reference to the number of hydrogen atoms they are either mono-, di-, or tribasic.
- An organic acid is an organic compound with acidic properties. The most common organic acids are the carboxylic acids, whose acidity is associated with their carboxyl group  $\text{-COOH}$ . Sulfonic acids, containing the group  $\text{-SO}_2\text{OH}$ , are relatively stronger acids.
- An inorganic salt is just any salt that doesn't contain carbon (making  $\text{NaCl}$  an inorganic salt).
- An organic salt is a salt (chemistry) containing an organic ion.

### Additives

- Odorants used for natural gas vary from country to country, depending on gas distribution regulations. Some odorants contain sulfur, which is oxidized to sulfur dioxide when the gas is burned.

### Solvents

- A solvent is a substance that dissolves a solute (a chemically distinct liquid, solid or gas), resulting in a solution. A solvent is usually a liquid but can also be a solid or a gas. The quantity of solute that can dissolve in a specific volume of solvent varies with temperature.

### Lubricants and Greases

- A lubricant is a substance introduced to reduce friction between surfaces in mutual contact, which ultimately reduces the heat generated when the surfaces move.
- Grease is a semisolid lubricant: the characteristic feature of greases is that they possess a high initial viscosity, which upon the application of shear, drops to give the effect of an oil-lubricated bearing of approximately the same viscosity as the base oil used in the grease.

### Water Treatment Products

- For the chemical treatment of water a great variety of chemicals can be applied.

### Catalysts

- A catalyst is a substance which speeds up a reaction, but is chemically unchanged at the end of the reaction. When the reaction has finished, you would have exactly the same mass of catalyst as you had at the beginning

### Gases

- Oxygen, Argon, Helium, Carbon Monoxide, Acetylene, Nitrogen, Carbon Dioxide, Hydrogen, Polysilicon and all gases that needs to be compressed in accordance with various industrial applications required by the market.
- Used in many different applications such as steelmaking, oil refining, medical applications, fertilizer, or semiconductors.
- Some examples of what 38.08.05G Pure Gases includes are: Air Gases, Rare Gases, Isotopes and Hydrocarbons.

### Fuels

- Gasoline known as petrol outside North America, is a transparent, petroleum-derived liquid that is used primarily as a fuel in internal combustion engines. It consists mostly of organic compounds obtained by the fractional distillation of petroleum, enhanced with a variety of additives.