Purified Water

218,318 Cubic Meters per year

CAS 7732-18-5 | LGC Standards.

Synonyms: distilled water, filtered water, and spring water.

EINECS(EC#): 231-791-2

Molecular Formula: H_2O

MDL Number: MFCD00011332

Molecular Weight:18.02

Chemical Properties

Chemical formula: The chemical formula for water is H_2O, which means it's made up of two hydrogen atoms and one oxygen atom.

Polarity: Water is polar.

Ionization: Pure water is slightly ionized, meaning it's made up of positively charged hydrogen ions (H^+) and negatively charged hydroxide ions (OH^-).

pH: The pH of water is a measure of how acidic or basic it is, and is an important indicator of water quality. The pH scale ranges from 0 to 14, with 7 being neutral.

Inorganic salts: Bottled, purified water may contain inorganic salts like magnesium chloride, magnesium sulfate, and calcium chloride to improve its taste.

Water also has other unique properties, such as:

Being a good solvent

Having a high heat capacity

Having a high heat of vaporization

Having cohesive and adhesive properties

Being less dense as a solid than as a liquid

Having a high surface tension

uses

Drinking: Purified water is the primary source of drinking water for households and offices.

Cooking: Purified water can be used for boiling, steaming, braising, and washing fruits and vegetables.

Beverages: Purified water can be used to brew coffee, tea, and other beverages.

Watering plants: Purified water can help plants grow healthy roots and stems.

Pet care: Purified water is free from toxins and chemicals that may be present in unfiltered water.

Laboratory testing: Purified water is used in laboratory testing because it removes contaminants that may interfere with processes.

Pharmaceuticals: Purified water is used in the manufacture of pharmaceuticals.

Eye drops: Pure water with no impurities or pyrogens is used in making eye drops.

Digestion: Purified water can help with digestion by breaking down food and softening the bowel.