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Product Information

Hydrochloric acid solution Cell Culture Tested

Product Number **H 9892**
Store at Room Temperature

Product Description

Molecular Formula: HCl
Molecular Weight: 36.46
CAS Number: 7647-01-0
Synonym: muriatic acid¹

This product is a 1.0 ± 0.1 N solution and is sterile-filtered. It is cell culture tested and is appropriate for use in cell culture applications.

This product is a clear colorless liquid which is a solution of hydrogen chloride gas dissolved in water.

Hydrochloric acid is a strong inorganic acid that is utilized widely in research and in large scale applications. Its large scale applications include the refinement of ore for the production of tin and tantalum, the cleaning of metal products, and the hydrolysis of starch and proteins in the manufacture of food products.¹ HCl is also frequently used in chemical synthesis, as in the preparation of polyhydroxylated amino acid derivatives, 3,4-disubstituted piperidines, norcarbovir analogs, and (α -hydroxyalkyl)phosphorus amphiphiles.^{2,3,4,5}

HCl is used to hydrolyze samples for chromatographic analysis, such as in matairesinol in flax seed, glycopeptides, κ -carrageenan derived oligosaccharides, and syn- and anti-1,3-diols.^{6,7,8,9} Several reports have described protein analysis for amino acid composition using HCl for peptide and protein hydrolysis.^{10,11,12,13}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This is an aqueous solution that can be diluted to any concentration in water, but since the dilution is exothermic, this product should be added carefully to the water.

Storage/Stability

The product is stable at room temperature if kept sealed and away from bases and metals. Solubility of HCl gas decreases somewhat with increased temperature. The solution may develop a yellowish color with time due to traces of iron, chlorine, or organic matter.

References

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