Summary of IS 14708:1999 - Ethyl Acrylate Specification

Definition of the Product:
IS 14708:1999 is the Indian Standard that specifies the requirements for Ethyl Acrylate, a chemical compound produced through the esterification of acrylic acid or acrylonitrile. Ethyl Acrylate is a flammable liquid widely used in various applications, including the manufacturing of leather auxiliaries, paper coatings, textile sizing agents, and as a water-based thickener. Due to its flammable nature and potential to form explosive vapor mixtures, ensuring its quality and safety is crucial for industrial applications.

Quality Parameters Expected by Consumers:
Consumers expect high-quality Ethyl Acrylate to meet several essential parameters, including:

Purity: A minimum assay of 99.5% by mass is required to ensure effective performance in diverse applications.
Acidity: The acidity level, expressed as acrylic acid, should not exceed 0.01% by mass to prevent adverse reactions in formulations.
Color: The color should be limited to a maximum of 20.00 on the Pt-Co scale, ensuring suitability for various applications.
Water Content: A maximum water content of 0.20% by mass is specified to maintain chemical integrity.
Inhibitor Levels: The concentration of inhibitors (as methyl ether hydroquinone) should not exceed 120 ppm to ensure stability during storage.

How the Standard Addresses These Expectations:
IS 14708:1999 effectively addresses these consumer expectations by establishing rigorous testing methods and quality control measures. The standard references various ASTM methods for assessing purity, acidity, water content, and inhibitor levels, ensuring comprehensive quality assurance. It also outlines specific sampling procedures to guarantee representative testing and mandates clear packaging and labeling requirements for traceability. By providing a framework for conformity assessment, IS 14708:1999 ensures that only high-quality Ethyl Acrylate that meets these stringent standards is available in the market, thereby safeguarding consumer interests and promoting industry compliance.