In-mold labeling has been used widely and for many years in decorating and providing information on all kinds of consumer products sold in plastic containers, such as food, cosmetics, even flower pots. To accommodate the use of In-mold labels on durable goods submitted to UL for certification, UL developed a Marking & Labeling System Recognition program specifically for In-mold labels.

The UL In-mold label (IML) program is designed to support label manufacturers and their customers who use IMLs to display safety-related information on UL certified products. In this program, samples of IMLs are evaluated in accordance with the same safety standards used to evaluate pressure-sensitive labels, including the Standard for Marking & Labeling Systems, UL 969; the CSA standard for Adhesive labels, C22.2 No. 0.15; as well as many IEC based UL end-product standards that require marking durability and test, depending on the particular end-product Permanence of Marking requirements.

IMLs are labels that have been specially designed so that they can be embedded into a molded plastic part during the molding process. The molding processes may be blow molding, injection molding or thermoforming. IMLs are evaluated in combination with generic plastic surfaces such as ABS, Polycarbonate, or Polypropylene, and one or more molding processes. To provide label manufacturers and their customers with the broadest Recognition based on the tests conducted, labels found suitable for being molded into a particular generic plastic are considered suitable for being molded into any filled or reinforced plastic of the same generic type. Also IMLs found suitable with two or more generic types of plastic can be considered suitable for being molded into blends of those plastics without additional testing.

While some end-product manufacturers may produce molded parts in-house, the molding of plastic parts is more commonly accomplished at a separate molding facility. To provide flexibility to end-product manufacturers, UL has established guidelines that allow end-product manufacturers to obtain In-mold labeled parts from the molder of their choice so long as the parts are molded within the prescribed molding process parameters, and the molder provides the required traceability documentation.

More details about UL’s Marking and Labeling System program can be found at www.ul.com/labels.