**Title:** ISO of solubility and water sorption for cements

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**Abstract:**
Clinical success of dental cements depends on parameters such as mechanical properties, biological effect on the dental tissues including the pulp, chemical bonding to tooth structure and solubility in oral environment. Solubility is weight reduction in surface or volume unite according to dissolution at standard temperature for a period of time in oral fluids. Solubility is one of shortcomings of dental materials that cause decreased physical and mechanical properties and longevity of restorations. Such solubility can cause deterioration that affects the marginal integrity of a restoration resulting in potential recurrent decay. Water sorption and solubility measure the resistance of a material to disintegration and dissolution consequently these are important properties in assessing the durability of dental cements. If clinicians do the laboratory tests according to a specific standard thus all of them will be done in the same way and results of related studies will be comparable. Finally, above properties can be evaluated universally.

This study introduces standard methods to evaluate water sorption and solubility and also acid erosion for dental cements.

**Keywords:** solubility, water sorption, acid erosion, dental cement, standard, ISO

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