## IS 419:2023 PUTTY FOR USE ON WINDOW FRAMES — SPECIFICATION

Putty is a sealing and glazing material primarily used to secure glass panes in window frames and provide a weatherproof seal. Putty is a malleable substance applied to hold glass firmly in position, fill gaps, and prevent water or air leakage. It is widely used in residential, commercial, and industrial settings for wooden, metal, or other types of window frames to ensure structural integrity and longevity.

Consumers expect window putty to exhibit strong adhesion, durability, and ease of application. Key quality parameters include **good workability** (smooth and consistent application), **crack resistance** to maintain its integrity over time, and **weather resistance** to withstand variations in temperature, moisture, and environmental stress. Additionally, consumers look for putty with **minimal shrinkage** and excellent **bonding properties** to ensure that the glass remains securely in place without loosening or cracking. Long-lasting performance, resistance to water ingress, and a smooth, paintable finish are also essential for ensuring aesthetic and functional satisfaction.

IS 419:2023 addresses these expectations by prescribing requirements and methods of sampling and test for putty for use in fixing glass panes on wood and metal frames and for filling splits, cracks and holes in wood or metal. It specifies properties like **consistency, form** to ensure the putty performs well under different environmental conditions and **lead restriction** to ensure human safety. The standard includes *tests* for **residue on sieve and water content**, ensuring that the putty maintains its integrity and securely holds the glass panes over an extended period. By adhering to this standard, manufacturers can deliver high-quality putty that meets consumer demands for reliability, longevity, and ease of use.