Plastic Caps & Closures

Product / Application	BIS (IS)	ISO	ASTM	DIN	Other Standards
PET Bottle Closure (Water)	IS 14543;IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	ISO 16470 (Aluminium Oxide and Hydroxide for Industrial Use, not applicable); No dedicated ISO product standard identified for PET closures; ISO 18601 (Packaging and the Environment — General Requirements)	ASTM D2659 (Standard Specification for Polyethylene Terephthalate (PET) and PETG Thermoplastic Containers, where applicable); ASTM D3475 (Classification of Child-Resistant Packages, where applicable); ASTM D3359 (Adhesion by Tape Test, where coatings apply); ASTM D638 (Tensile Properties of Plastics)	DIN EN 1186 (Materials and Articles in Contact with Foodstuffs); DIN EN ISO 527-1 (Tensile Properties of Plastics); DIN EN ISO 1628-5 (Viscosity Number of PET, where PET material applies); DIN EN ISO 178 (Flexural Properties)	FDA 21 CFR 177 (Food Contact Plastics); EU 10/2011; NSF/ANSI 51 (Food Equipment Materials)
PET Bottle Closure (CSD)	IS 12252 (Polyethylene Terephthalate (PET) Material); IS 14543 (Packaged Drinking Water Bottles – Closure Applications); IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	ISO 18601 (Packaging and the Environment — General Requirements); ISO 22000 (Food Safety Management Systems, where food-contact application applies)	ASTM D2659 (PET and PETG Thermoplastic Containers, where applicable); ASTM D4164 (Standard Practice for Monitoring and Calibrating Service Packaging Test Equipment, where applicable); ASTM D638 (Tensile Properties of Plastics); ASTM D256 (Izod Impact Resistance of Plastics)	DIN EN 1186 (Food Contact Materials); DIN EN ISO 527-1 (Tensile Properties); DIN EN ISO 178 (Flexural Properties); DIN EN ISO 179-1 (Impact Strength)	FDA 21 CFR 177; EU 10/2011; Beverage Industry Packaging Guidelines
Pharmaceutical Closure	IS 12252 (PET); IS 10910 (PP); IS 7328 (HDPE) (Depending on Material); IS 17387 (Medical/Pharmaceutical Packaging Applications); IS 14553 (Measuring Caps and Closures for liquid pharmaceutical applications);IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 15201	ISO 15378 (Primary Packaging Materials for Medicinal Products — Particular Requirements for the Application of ISO 9001 with Good Manufacturing Practice)	ASTM D3475 (Classification of Child-Resistant Packages, where applicable); ASTM D4169 (Performance Testing of Shipping Containers and Systems, where applicable); ASTM D638 (Tensile Properties of Plastics); ASTM D1894 (Coefficient of Friction, where applicable)	DIN EN ISO 15378 (Primary Packaging Materials for Medicinal Products); DIN EN ISO 10993-5 (Biological Evaluation — Cytotoxicity, where applicable); DIN EN ISO 527-1 (Tensile Properties); DIN EN ISO 175 (Chemical Resistance)	USP <661> (Plastic Packaging Systems); USP <671> (Packaging Performance); FDA 21 CFR 211.132 (Tamper Evident Packaging, where applicable)
Child Resistant Closure	IS 17803 (Child-Resistant Packaging for Medicinal Products); IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	ISO 8317 (Child-resistant Packaging — Requirements and Testing Procedures for Reclosable Packages)	ASTM D3475 (Classification of Child-Resistant Packages); ASTM D3198 (Standard Test Method for Application and Removal Torque of Threaded or Lug-Style Closures); ASTM D3474 (Standard Practice for Calibration and Use of Torque Meters Used in Packaging Applications)	DIN EN ISO 8317 (Child-Resistant Packaging — Requirements and Testing Procedures); DIN EN ISO 527-1 (Tensile Properties); DIN EN ISO 178 (Flexural Properties); DIN EN ISO 15378 (Primary Packaging Materials for Medicinal Products, pharmaceutical applications)	US 16 CFR 1700 (Poison Prevention Packaging Act); ISO 8317 excluded; EN 14375 excluded; CPSC Child Resistant Packaging Requirements
Tamper Evident Closure	IS 14543 (Packaged Drinking Water Bottles – Tamper-Evident Closure Applications); IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	ISO 21976 (Packaging — Tamper Verification Features for Medicinal Product Packaging)	ASTM D3475 (Child-Resistant Packaging Classification, where applicable); ASTM D4169 (Performance Testing of Shipping Containers and Systems); ASTM D638 (Tensile Properties of Plastics)	DIN EN ISO 15378 (Primary Packaging Materials for Medicinal Products); DIN EN ISO 527-1 (Tensile Properties); DIN EN ISO 178 (Flexural Properties); DIN EN ISO 18604 (Packaging and Environment — Material Recycling, where applicable)	FDA 21 CFR 211.132 (Tamper-Evident Packaging for OTC Drugs); USP <671> (Packaging Performance Testing); CPSC Packaging Requirements
Flip Top Closure	IS 10910 (Polypropylene and its Copolymers for Safe Use in Contact with	ISO 18601 (Packaging and the Environment — General Requirements); ISO 15378	ASTM D2659 (PET and PETG Thermoplastic Containers, where applicable); ASTM D3475 (Child-	DIN EN 1186 (Food Contact Materials, where applicable); DIN EN ISO 527-1 (Tensile Properties);	FDA 21 CFR 177; EU 10/2011; CPSC Packaging Requirements (where child safety applies)

Product / Application	BIS (IS)	ISO	ASTM	DIN	Other Standards
	Foodstuffs, Pharmaceuticals and Drinking Water);IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	(Primary Packaging Materials for Medicinal Products, where pharmaceutical use applies)	Resistant Packages, where applicable); ASTM D638 (Tensile Properties of Plastics); ASTM D1894 (Coefficient of Friction of Plastic Film and Sheeting, where applicable)	DIN EN ISO 178 (Flexural Properties); DIN EN ISO 179-1 (Impact Strength)	
Cosmetic Closure	IS 10910 (PP); IS 7328 (HDPE); IS 12252 (PET) (Depending on Material);IS 9543; IS 15615; IS 11054; IS 14552; IS 14316; IS 14553; IS 15201	ISO 22716 (Cosmetics — Good Manufacturing Practices (GMP) — Guidelines); ISO 18601 (Packaging and the Environment)	ASTM D2659 (PET and PETG Thermoplastic Containers, where applicable); ASTM D638 (Tensile Properties of Plastics); ASTM D256 (Izod Impact Resistance of Plastics); ASTM D1894 (Coefficient of Friction, where applicable)	DIN EN ISO 527-1 (Tensile Properties); DIN EN ISO 175 (Resistance to Cosmetic Chemicals); DIN EN ISO 178 (Flexural Properties); DIN EN ISO 179-1 (Impact Strength)	FDA Cosmetic Packaging Regulations; EU Cosmetic Regulation (EC) No. 1223/2009; IKW Cosmetic Packaging Guidelines

Source field: Plastic and Plastic Products