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Projectiles & Flying Toys Requirements of Different Countries

	USA ASTM F963 - 08	Europe EN71 Part 1 : 2005	Australia/New Zealand AS/NZS ISO 8124-1:2002
General	These requirements apply to toys that are intended to launch projectiles into free flight by means of a discharge mechanism in which the kinetic energy of the projectile is determined by the toy and not by the user. (4.20.1)	All rigid projectiles shall have a tip radius ≥ 2 mm.(4.17.1a) Resilient impact surfaces shall not become detached under 60N (4.17.1b) Helicopter rotors and single propellers in nearly vertical free flight shall have a ring around the perimeter (4.17.1c) Length of projectile with a suction cup as impact area ≥ 57mm (4.17.1d)	Rigid projectiles shall have a tip radius of ≥ 2 mm. Rotor/propellers shall be designed that the perimeter of the propeller is in the form of a ring in order to reduce the risk of injury. (4.18.1)
Arrow	Any arrow shall have a protective tip (4.20.3)	Arrows whose maximum kinetic energy exceeds 0,08 J, shall be protected by a resilient material (e.g. rubber). The maximum KE of the resilient impact surface shall not exceed 0,16 J/cm2 (4.17.3 b), the potential danger shall be drawn to the attention of the user (4.17.4 c)	Has a max. KE exceeds 0.08J, the KE per unit area of contact shall not exceed 0.16J/cm2. (4.18.3)
Discharge Mechanisms	Discharge mechanisms shall be unable to discharge potentially hazardous improvised projectiles such as pencils or pebbles without modification by the user. (4.20.2)	Discharge mechanism able to discharge an object other than that provided with the toy, or if a projectile with KE >0,08 J, the potential danger shall be drawn to the attention of the user (4.17.3 c)	Shall be designed that it will not discharge any other type of readily available projectile (e.g. a stone, pencil or nail). The potential danger of misuse shall be drawn to the attention of the user. (4.18.2 c)
Projectiles in which the kinetic energy of the projectile is determined by the toy	Shall not have any sharp edges, sharp points, or small parts (4.20.1.1) Any rigid projectile that has a KE that exceeds 0.08 J shall have an impact surface of a resilient material. (4.20.1.3)	The maximum KE: 1) 0,08 J for rigid projectiles without resilient impact surfaces; 2) 0,5 J for resilient projectiles or projectiles with resilient impact surfaces (e.g. rubber). (4.17.3 a)	Shall not have any sharp edges, sharp points, or small parts. Any projectile that has a max. KE exceeds 0.08 J shall have an impact surface of a resilient material that the KE per unit area of contact shall not exceed 0.16J/cm2. The potential danger of misuse shall be drawn to the attention of the user. (4.18.2)
Projectiles in which the kinetic energy of the projectile is determined by the user	Not applicable	Darts shall be blunted or points protected by a resilient material having an impact area of at least 3 cm^2. Points shall not be made of metal; except that if fitted with magnetic metal discs, the disc has an area ≥ 3 cm^2. (4.17.2)	If in the form of an arrow or dart, the projectile shall either have a protective tip that is integral with the front end of the shaft; or have a blunted front end which is attached a protective tip. The protective tip shall have a contact area of at least 3 cm2. (4.18.3)