Reference Guide for Suture Use in Small Animals

Suture Type	Monofilament or Multifilament	Synthetic or Natural	Absorbable or Nonabsorbable	Important Considerations
Catgut	Multifilament	Natural	Absorbable (60d)	Risk of severe foreign body reactions
Chromic Gut	Multifilament	Natural	Absorbable	Never use gut in infected sites or tissues as the presence of macrophages will cause much more rapid loss of tensile strength and increase risk of dehiscence
Vicryl	Multifilament	Synthetic	Absorbable (14d)	Tensile strength decreases in alkaline environments
Monocryl	Monofilament	Synthetic	Absorbable (7d)	Most pliable of monofilaments
PDS	Monofilament	Synthetic	Absorbable (4wks)	More reactive when used intradermally so be sure to bury the knot deep
Silk	Multifilament	Natural	Nonabsorbable	Loses tensile strength when wet
Nylon	Monofilament	Synthetic	Nonabsorbable	Byproducts are antimicrobial
Polypropylene	Monofilament	Synthetic	Nonabsorbable	Good for use in contaminated wounds

- General notes
  - Natural suture material is usually degraded by phagocytosis, while synthetic suture material is usually degraded by hydrolysis
  - All absorbable sutures lose their tensile strength within 60 days
  - Suture sizing in small animals
    - Usually between 4-0 and 0
      - 4-0 commonly used for delicate tissues like intestine, bladder, SQ tissue
      - 3-0 commonly used in abdominal closure in cats
      - 2-0 or 0 for abdominal closure in dogs
    - Smaller than 4-0 usually used for tissues like the cornea
    - Larger than 0 tends to be used in extremely large dogs or in large animal species

Size	U.S.P	7/0	6/0	5/0	4/0	3/0	2/0	0	1	2	3	4	5
	EP (Metric)	0.7	1	1.5	2	3	3.5	4	5	6	7	8	9