



TECHNICAL DATA SHEET (v2)

NOVEMBER 2017





PRODUCT DESCRIPTION

Technology	Cyanoacrylate
Type of Chemistry	n-Butyl cyanoacrylate
Appearance	Violet transparent liquid
Viscosity	Medium Viscosity
Intended Use	Small wounds and skin
	injuries protection

CUANTUM *liquid bandage* is a Topical Tissue Adhesive formulation based on n-butyl cyanoacrylate (medical grade). Forms a breathable, protective layer that naturally sloughs off as the dermal layer continues to grow.

In contact with the body's natural oils and moisture generates a protective layer, which is acting as a second skin enhancing the natural healing process of small wounds or skin injuries. CUANTUM *liquid bandage* helps prevent infection by reducing exposure to dirt and germs.

It is flexible, conforms to all curves and body contours to provide a positive, protective shield on elbows, knees, fingertips, neck, feet and more. It dries quickly and its application is painless and no stinging.

It is 100% waterproof and long lasting.

CUANTUM liquid bandage is supplied in 2g aluminum smart tube, which let several applications.

TYPICAL UNCURED ADHESIVE PROPERTIES

Appearance: Violet transparent liquid Relative density, 20 °C, g/cm³: 1,01 Viscosity, 25 °C, cP: 150-250

Shelf life: 24 months

TYPICAL POLIMERIZATION PROPERTIES

SETTING TIME

Setting time is the amount of time required for the liquid adhesive to polymerize sufficiently for the wound edges to stay together without assistance.

A standard application of CUANTUM *liquid bandage* polymerizes between 30 and 60 seconds, depending of the thickness of the applied layer, creating a film that performs a strong adhesion, sealing and protection to the application area.

POLYMERIZATION HEAT

The heat released during the polymerization is dependent on the amount of adhesive applied.

Polymerization heat	Method
283 J/g	DSC

A standard application of CUANTUM *liquid bandage* causes a skin surface temperature increase of about 3 °C, which assures a painless and not stinging application. The low released heat avoids any kind of tissue damage.





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TYPICAL CURED ADHESIVE PROPERTIES

TENSILE STRENGTH

The tensile strength of a material is the maximum amount of tensile stress that it can take before failure.

Tensile strength	ASTM method
1.19 MPa	D882-02

LAP-SHEAR TENSILE STRENGTH

Lap Shear tensile strength determines the shear strength of adhesives for bonding materials, in this case, a porcine skin single-lap-joint specimen. The test is applicable for determining adhesive strength.

Lap-shear tensile strength	ASTM method
0.41 MPa	F2255-05

T-PEEL STRENGTH

T-Peel strength indicates the average load per unit width of bond line required to produce progressive separation of two bonded, flexible porcine skin adherents.

T-Peel strength	ASTM method
0.4 MPa	F2256-05

WOUND CLOSURE STRENGTH

The wound closure strength is the force required to separate the edges of a glued incision in porcine skin when pulling apart the wound. This property is tested over pigskin.

Closure strength	ASTM method
0.1 MPa	F2458-05

GENERAL INFORMATION

DIRECTIONS

Preparation:

Wash area thoroughly and make sure it is clean and dry. Do not apply any ointments, creams or lotions before or after application.

Application:

- 1. Remove the cap.
- 2. Topically apply an appropriate amount of CUANTUM *liquid bandage* to the desired area.
- 3. Setting time will vary by thickness of application from 30 seconds to 1 minute.
- 4. If placed in undesirable area, it can be easily wiped off with a tissue.
- 5. Make sure the bandage is fully dried before allowing it to come in contact with other objects.
- 6. After using the product clean the application tip with a tissue and replace overcap for future use.

Removal:

Product will slough off naturally as the dermal layer continues to grow. It can be removed by applying lotions, ointments, or emollients and peeled off.

Storage:

Storage the product under smooth temperature and humidity conditions. Storage with the cap in the upright position is preferred.

Conservation:

CUANTUM *liquid bandage* is a medium viscosity liquid. Discard the product in case of no fluidity.





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PRECAUTIONS AND WARNINGS

Please read warnings and directions before using.

Do not use in or around the eyes or on burns, wounds or skin with active signs of infection.

Avoid placing adhesive in lacerations.

Consult your doctor for use in case of serious wound, burn or animal bite.

Product bonds to skin and eyes in few seconds.

KEEP OUT OF REACH OF CHILDREN.

CAUTION: Should not use if allergic to cyanoacrylate.

IN THE CASE OF CONTACT WITH EYES:

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.