GluStitch Inc.

Safety Data Sheet

Section 1: Identification

Product Name: CYANOACRYLATE: N-BUTYL and 2-OCTYL CYANOACRYLATE COMBINED TOGETHER

Synonyms: N/A

CAS Number Butyl: 6606-65-1 CAS Number Octyl: N/A

Product Use: Liquid Tissue Adhesive **Manufacturer/Supplier:** GluStitch Inc.

Address: 307 – 7188 Progress Way, Delta, B.C., Canada V4G 1M6

General Information: 1-877-940-2262

Transportation Emergency Number: 1-877-940-2262

Section 2: Hazard(s) Identification

GHS Classification:

| Health | Environmental | Physical |
|--|---------------|----------|
| Acute Toxicity – N/A | None | None |
| Eye Corrosion - Category 2 | | |
| Skin Corrosion – N/A | | |
| Skin Sensitization – N/A | | |
| Mutagenicity – N/A | | |
| Carcinogenicity – N/A | | |
| Reproductive/Developmental – N/A | | |
| Target Organ Toxicity (Repeated) – N/A | | |

GHS Label:

| Symbols: None | | | |
|-------------------|--------------------------|--|--|
| Hazard Statements | Precautionary Statements | | |
| | None | | |

Section 3: Composition/Information on Ingredients

| Component | CAS Number | Weight % |
|-------------------------------------|------------|----------|
| n-Butyl cyanoacrylate | 6606-65-1 | 1-100 |
| 2-Octyl cyanoacrylate | N/A | 1-100 |
| (See Section 8 for Exposure Limits) | | |

Section 4: First-Aid Measures

Eye: If eyelids are bonded, release eyelashes with a pad soaked in warm water. Cyanoacrylate that has bonded to eye protein will produce tears, which will assist in the debonding process. Keep eye covered with a wet pad until debonding is

complete, usually within 1 to 3 days - do not force eye open. Seek medical advice if solid particles of cyanoacrylate are trapped behind eyelid – this may cause abrasive damage.

Skin: Do no force separation. Peel or roll skin apart in warm soapy water using a blunt instrument such as a spoon. Presoaking in a solution of 5% sodium bicarbonate will assist separation.

Inhalation: Remove to fresh air. If symptoms persist, call a physician.

Ingestion: Do no induce vomiting. Give 1-4 glasses of water to drink to dilute stomach contents. Do not give anything by mouth if victim is unconscious or convulsing. Obtain immediate medical attention. Saliva should lift adhesive in 12 to 48 hours. Avoid swallowing adhesive after detachment. Lips may become bonded together, apply copious amounts of warm water and encourage wetting/pressure from saliva inside mouth. Peel or roll lips apart gently. Call a physician.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Water spray, CO₂, Foam, Dry Chemical

Fire Fighting Procedures: Water full protective equipment including self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Water may spread fire. Product floats on water when cured. Acrid smoke and irritating fumes (oxides of carbon – oxides of nitrogen) occur in fire conditions.

Combustion Products: Not Determined (N/D)

Section 6: Accidental Release Measures

Use water spray to polymerize scrape off floor. Solidified material may be scraped from surfaces for disposal. Wear appropriate protective clothing. Prevent material from entering drains and watercourses.

Section 7: Handling and Storage

Avoid contact with eyes, skin and clothing. Avoid inhaling vapors on application. Avoid moisture, direct UV sunlight and prolonged storage above 25 °C (77 °F).

Section 8: Exposure Controls/Personal Protection

Exposure Limits

Component, n-Butyl Cyanoacrylate - N/D

Engineering Controls: Local exhaust to prevent eye irritation.

Personal Protective Equipment (PPE)

Eye Protection: Chemical goggles, safety glasses with side shields.

Skin Protection: Chemical resistant gloves – polyethylene recommended, rubber apron.

Respiratory Protection: Normally not necessary. A NIOSH approved organic vapor canister may be used.

Section 9: Physical and Chemical Properties

Flashpoint: 85-112°C (185-233°F) Auto-ignition Temperature: N/D Boiling Point: >150°C (302°F)

Melting Point: N/D **Vapor Pressure:** N/D

Vapor Density(Air=1): N/D

% Solubility in Water: Negligible, polymerizes in water.

Pour Point: N/D

Molecular Formula: N/D

Odor/Appearance: Clear or violet liquid, slightly pungent/sharp order

Lower Flammability Limit: N/D Upper Flammability Limit: N/D Specific Gravity: 0.989-1.444 (H₂O =1)

% Volatile: 0 at 21 °C (70 °F) Evaporation Rate (Water=1): N/D

Viscosity: N/D

Octanol/Water Partition Coefficient: N/D

pH: N/A

Molecular Weight: N/D

Section 10: Stability and Reactivity

Stability/Incompatibility: Stable under normal conditions. Incompatible with Amines, Alcohols, Water, cotton, wool bases. Avoid temperatures over >38 °C (100 °F).

Hazardous Reactions/Decomposition Products: Combustible by-products of carbon monoxide and dioxide. Avoid temperatures >38°C (100°F).

Section 11: Toxicological Information

Signs and Symptoms of Overexposure: Cyanoacrylate vapors are irritating to eyes and mucous membranes; prolonged and repeated overexposure may result in allergic reactions (rhinitis) with asthma-like symptoms in certain individuals. In the event of fire or heating, cyanoacrylate adhesives increase their volatility and this increases the risk of respiratory irritation and sensitization.

Acute Effects:

Eye Contact: Weeping, tears and double vision may be experienced until polymerization has occurred. If cured cyanoacrylate enters the eye, there is a chance of corneal damage due to abrasion. Irritation with pain, corneal abrasions, keratoconjunctivities and eyelash loss occurs.

Skin Contact: Contact dermatitis may occur after chronic repetitive exposure of the skin to liquid monomer.

Inhalation: May cause irritation with possible asthma-like symptoms in certain individuals.

Ingestion: Unlikely route of exposure due to polymerization. Bonds to oral tissue in seconds. Saliva will lift adhesive in one to two days.

Target Organ Effects: N/A

Chronic Effects: This product is not expected to cause long-term adverse health effects. Not considered carcinogenic by NTP, IARC or OSHA.

Medical Conditions Aggravated by Exposure: Pre-existing skin, eye, and respiratory disorders may be aggravated by exposure. The vapour is irritating to eyes and mucous membranes. Prolonged and repeated overexposure to vapours may produce allergic reactions with asthma-like symptoms in sensitive individuals.

Acute Toxicity Values

 $\begin{aligned} & Oral \ LD_{50} \ (Rat) = N/D \\ & Dermal \ LD_{50} \ (Rabbit) = N/D \\ & Inhalation \ LC_{50} \ (Rat) = N/D \end{aligned}$

Section 12: Ecological Information

N/D

Section 13: Disposal Considerations

This product is not a hazardous waste. Flood with water to polymerize. Soak up with an inert absorbent (earth or sand). Dispose of in an approved landfill in accordance with local authority regulations.

Section 14: Transport Information

There is no degree of hazard associated with the transportation of this product. Not restricted for transportation by air, sea, road.

Section 15: Regulatory Information

N/A

Section 16: Other Information

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of GluStitch Inc's knowledge and belief but is not guaranteed to be so. Nothing herein is to be constructed as recommending any practice or any product in violation of any patent or is violation of any law or regulation. It is the user's responsibility to determine for himself the suitability if any materials for a specific purpose and to adopt such safety precautions as may be necessary. GluStitch Inc makes no warranty as to the results to be obtained in using any material and, since conditions of use are not under the control of GluStitch Inc, we must necessarily disclaim all liability with respect to the use of any material supplied by us.