MATERIAL SAFETY DATA SHEET

Instant Liquid Bond

IDENTITY (*As used on label and list*)	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
GRAVOBOND Cyanoacrylate Adhesive	

SECTION I

Manufacturer's Name	Emergency Telephone Number
	(800) 964-6660
Palm Labs., Inc	Telephone Number For Information.
10 Office Way, Suite 250	(843) 686-2345
Hilton Head, SC, 29928	Date Prepared
	02/05/2009
	Signature of Preparer (optional)

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s)	CAS NO	EINECS NO	%
Ethyl Cyanoacrylate	7085-85-0	230-391-5	80 – 100

Ingredients With Exposure Limits	ACGIH (TLV)	OSHA (PEL)	OTHER
Ethyl Cyanoacrylate	0.2 ppm TWA	none	none

SECTION III - Physical/Chemical Characteristics

Appearance and Odor Clear liquid, Acrid odor	Boiling Point > 300° F.	Specific Gravity 1.05 – 1.08
Solubility in Water Polymerizes	Melting Point Not determined	Vapor Pressure < 0.2 mm Hg
VOC coefficient < 3 %	Evaporation Rate Not available	Autoignition Temp. 905° F

SECTION IV - Fire And Explosion Hazard Data

Flash Point (Tag Closed Cup)
176° F - 200° F

Extinguishing Media
Dry Powder, Foam, Carbon Dioxide

Special Fire Fighting Procedures
Firefighters should wear self-contained breathing apparatus

Hazardous Combustion Product
Trace amounts of toxic and/or irritating fumes may be released.

Unusual Fire and Explosion Hazards
None

SECTION V - Reactivity Data

Stability	Stable under recommended storage conditions
Incompatible Materials to Avoid	Water, amines, alkalis and alcohol
Hazardous Polymerization	Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
Hazardous Decomposition Products	None
Conditions to avoid	Spontaneous polymerization

SECTION VI - Health Hazard Data

Routes of Entry	Inhalation?	Skin?	Ingestion?	Eys?
	Yes	Yes	No	Yes

First Aid Measures:	Inhalation	Remove to fresh Air
	Skin Contact	Soak in warm water, do not pull apart. May gently pry apart. Cyanoacrylates give off heat on solidification and in rare cases, a large drop can generate enough heat to cause a burn. Burns should be treated normally after adhesive is removed. If lips are stuck together, use saliva inside the mouth to provide maximum wetting and gently roll apart.
	Ingestion	Ensure that breathing passages are unobstructed. The product will polymerize immediately in the mouth making it impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).
	Eye Contact	If eye is bonded closed, release eyelashes with warm water by covering with wet pad. Product will bond to eye protein causing lachrymatory effect which will help debond material. Keep eye covered with wet, warm pads 1-3 days until debonding is complete. Do not force eye open. Seek medical attention if solids are trapped behind the eyelid.

Carcinogenicity	NTP	IARC Monograghs?	OSHA Regulated?
	None	No	No

Toxicological Information

Inhalation	Vapors irritating to respiratory system and eyes in dry atmospheres. Prolonged exposure to high concentration may lead to chronic effects in sensitive individuals.
Skin	Irritating to the skin. Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 rabbit>2000mg/kg. Due to polymerization at the skin surface, allergic reaction in unlikely to occur.
Ingestion	Cyanoacrylates are considered to have low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it polymerizes instantly in the mouth.
Eyes	Irritant to the eyes. Liquid product will bond eyelids. In dry atmospheres (RH<50%), vapors may cause irritation and lachrymatory effect.

SECTION VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Ventilate area and prevent product from entering waterways. Flush area with copious amounts of cool water. Allow to harden and break up and dispose of according to local regulations. Cured material can be disposed of as non-hazardous waste. Do not use cloths for mopping up.

Waste Disposal Method.

Cured material can be disposed of as non-hazardous waste. Do not use cloths for mopping up.

Ecotoxicity Effects

Biodegradable product of low ecotoxicity. Biological and Chemical Oxygen Demands (BOD and COD) are insignificant.
Not a water pollutant.

Safe Handling

Ventilation is recommended when using large volumes. Avoid skin and eye contact. Material should be handled in a cool, dry area. Use polyethylene or polypropylene gloves when handling large volumes. DO NOT USE PVC, rubber, nylon or cotton gloves. Eye protection should be used any time there is a risk of splattering.

Safe Storage

Material should be handled in a cool, dry area. Containers should be kept tightly closed. Avoid storage in sunlight. For maximum shelf life, store material in original containers and keep refrigerated (36°-46°F).

SECTION VIII – Transport Information

Land Transport (USDOT):	
Proper shipping name:	Unrestricted
Hazard class or division	Unrestricted
Identification Number	None
Packing Group	None
Sea Transportation (IMDG):	
Proper shipping name	Unrestricted
Hazard class or division	Unrestricted
Identification Number	None
Packing Group	None
Air Transportation (IATA/ICAO):	
Proper shipping name	Aviation regulated liquids n.o.s.
Hazard class or division	9
Identification Number	UN 3334
Packing Group	None
Exceptions	*(Not more than 500ml) Unrestricted*