

HMIS RATING	
Health	2
Flammability	2
Reactivity	2

## MATERIAL SAFETY DATA SHEET

NFPA 704 RATING	
Health	2
Flammability	2
Reactivity	2
NFPA 308 LEVEL	
N/A	

Kimball Midwest  
P.O. Box 2488  
Columbus, OH 43216-2488  
Corporate & Emergency Telephone (614-228-6701)

### 1. PRODUCT IDENTIFICATION

PART NUMBER .....80-190  
PRODUCT NAME .....Surface Inensitive Instant Adhesive Gel  
CHEMICAL FAMILY .....N/A  
DOT SHIPPING .....Unrestricted

### 2. HAZARDOUS INGREDIENTS

Specific chemical identity, common names	OSHA PEL	ACGIH TLV	STEL	%
Ethyl Cyanoacrylate (7085-85-0)	None	None	-	85-90
Poly (methyl methacrylate) (9011-14-7)	-	-	-	5-10
Silica, Amorphous Treated (112945-52-5)	6mg/m3	10mg/m3	-	5-10
*Hydroquinone (123-31-9)	2mg/m3	2mg/m3	4mg/m3	0.1-0.5
Proprietary Items	-	-	-	3

All chemical compounds marked with an asterisk (\*) are toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372. You must notify each person to whom this mixture of trade name product is sold. This statement must not be detached. Any copy or redistribution of this Material Safety Data Sheet shall include this statement.

### 3. PHYSICAL DATA

\*OILING POINT (RANGE) ..... >300° F  
VAPOR PRESSURE @ 80° F ..... <0.2mm  
VAPOR DENSITY ..... Approx. 3  
SOLUBILITY IN WATER ..... Polymerized by water  
SPECIFIC GRAVITY (H<sub>2</sub>O = 1) ..... 1.05  
MELTING/FREEZING POINT ..... N/A  
EVAPORATION RATE (Butyl Acetate = 1) ..... N/A  
V.O.C. (EPA Method 24) ..... 85.4%; 897 g/l  
APPEARANCE AND ODOR ..... Water white gel, sharp odor

### 4. FIRE AND EXPLOSION DATA

FLASH POINT ..... 150-200° F T.C.C.  
UPPER EXPLOSIVE LIMIT (%) ..... N/A  
LOWER EXPLOSIVE LIMIT (%) ..... N/A  
EXTINGUISHING MEDIA ..... Dry chemical, CO<sub>2</sub>, or foam.  
SPECIAL FIREFIGHTING PROCEDURES ..... Firefighters should wear NIOSH approved positive pressure self-contained breathing apparatus.  
FIRE AND EXPLOSION HAZARDS ..... Irritating organic vapors.

### 5. HEALTH EFFECTS DATA

#### SHORT TERM EFFECTS OF EXPOSURE

ROUTE OF ENTRY ..... Skin, eyes, ingestion, inhalation.  
HEALTH HAZARDS  
(Acute & Chronic) ..... Toxicity: Eye and skin irritant. Skin contact may cause burns. Bonds skin rapidly and strongly. Estimated oral LD50 more than 5,000mg/kg. Estimated dermal LD50 more than 2,000mg/kg. Literature referenced target organ and other health effects:  
Ethyl Cyanoacrylate - Lung, skin  
Poly (methyl methacrylate) - No data  
Silica, Amorphous Treated - Lung  
Hydroquinone - Blood, irritant, liver, mutagen, nervous system, reproductive.

#### SIGNS AND SYMPTOMS

IF EXPOSURE ..... Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and repeated overexposure to vapors may produce allergic reactions with asthma-like symptoms in sensitive individuals.

### 5. HEALTH EFFECTS DATA (Continued)

MEDICAL CONDITIONS GENERALLY  
AGGRAVATED BY EXPOSURE ..... None known

#### FIRST AID PROCEDURES

EYES ..... Flush with water for at least 15 minutes. See the supplemental page for emergency procedures.  
SKIN CONTACT ..... Soak in warm water. See supplemental page for emergency procedures.  
INHALATION ..... Remove to fresh air. If symptoms persist, obtain medical attention.  
INGESTION ..... Ingestion is not likely. See supplemental page for emergency procedures.

#### SPECIAL HEALTH EFFECTS

CARCINOGEN (OSHA Guidelines) ..... Presently not on any lists.

### 6. REACTIVITY

STABILITY ..... Stable  
INCOMPATIBILITIES ..... Polymerized by contact with water, alcohols, amines, alkalies.  
NFPA REACTIVITY HAZARD ..... 2  
HAZARDOUS DECOMPOSITION PRODUCTS ..... Irritating organic vapors.  
HAZARDOUS POLYMERIZATION ..... Will not occur.  
HAZARDOUS POLYMERIZATION CONDITIONS ..... None known.

### 7. PRECAUTIONS FOR SAFE HANDLING AND USE

#### PROTECTIVE EQUIPMENT

REQUIREMENTS ..... Safety glasses or goggles. Neoprene, rubber, or butyl rubber gloves. Do not use cotton gloves. Positive down-draft exhaust ventilation should be provided to maintain vapor concentrations below TLV.  
WASH REQUIREMENTS ..... Wash with soap and water.  
SPILL OR LEAK PROCEDURES ..... Flood with water to polymerize. Soak up in an inert absorbent.  
WASTE DISPOSAL METHODS ..... Polymerize as above Incinerate following EPA and local regulations.  
HANDLING & STORAGE ..... Store at temperatures below 75° F to maximize shelf life.  
OTHER PRECAUTIONS ..... Avoid contact with skin or eyes. Avoid breathing vapor.

### 8. ADDITIONAL INFORMATION

Use self contained breathing apparatus if TLV limits are exceeded. Do not eat or smoke while using. Wash hands after use.

THE INFORMATION GIVEN AND THE RECOMMENDATIONS MADE HEREIN APPLY TO OUR PRODUCT(S) ALONE AND ARE NOT COMBINED WITH OTHER PRODUCT(S). SUCH ARE BASED ON OUR RESEARCH AND ON DATA FROM OTHER RELIABLE SOURCES AND ARE BELIEVED TO BE ACCURATE. NO GUARANTEE OF ACCURACY IS MADE. IT IS THE PURCHASER'S RESPONSIBILITY BEFORE USING ANY PRODUCT TO VERIFY THIS DATA UNDER THEIR OWN OPERATION CONDITIONS AND TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PURPOSES.

# KIMBALL MIDWEST

Your Partner in Performance

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**Information For First Aid And Casualty On Treatment For Adhesion Of  
Human Skin To Itself If Caused By Cyanoacrylate Adhesives**

Kimball-Midwest  
P.O. Box 2488  
Columbus, OH 43216-2488  
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Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds human tissue, including skin in seconds. Experience has shown that accidents due to cyanoacrylates are handled best by passive, non-surgical first aid. Treatment of specific types of accidents are given below.

**SKIN CONTACT**

Remove excess adhesive. Soak skin in warm, soapy water. The adhesive will come loose from the skin in several hours. Cured adhesive does not present a health hazard, even when bonded to the skin.

Avoid contact with clothes, fabrics, rags or tissues. Contact with these materials may cause polymerization. The polymerization of large amounts of adhesive will generate heat causing smoke, skin burns, and strong, irritating vapors. Wear nitrile or polyethylene gloves and apron when handling large amounts of adhesive.

**SKIN ADHESION**

First immerse the bonded surfaces in warm, soapy water. Peel or roll the surfaces apart with the aid of a blunt edge, e.g. a spatula or a teaspoon handle; then remove adhesive from the skin with soap and water. Do not try to pull surfaces apart with a direct opposing action.

**EYELID TO EYELID OR EYEBALL ADHESION**

In the event that eyelids are stuck together or bonded to the eyeball, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in 1-4 days. There will be no residual damage. Do not try to open the eye by manipulation.

**ADHESIVE ON THE EYEBALL**

Cyanoacrylate introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods, generally covering several hours. This will cause periods of weeping until clearance is achieved. During the period of contamination, double vision may be experienced together with a lachrymatory affect, and it is important to understand the cause and realize that disassociation will normally occur within a matter of hours, even with gross contamination.

**MOUTH**

If lips are accidentally stuck together, apply lots of warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not attempt to pull the lips with direct opposing action.

It is almost impossible to swallow cyanoacrylate. The adhesive solidifies and adheres in the mouth. Saliva will lift the adhesive in one half to two days. In case a lump forms in the mouth, position the patient to prevent ingestion of the lump when it detaches.

**BURNS**

Cyanoacrylates give off heat on solidification. In rare cases a large drop will increase in temperature enough to cause a burn. Burns should be treated normally after the lump of cyanoacrylate is released from the tissue as described above.

**SURGERY**

It should never be necessary to use such a drastic method to separate accidentally bonded skin.

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