

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION MSDS Name : Instant Bonding Glue in Cyanoacrylate
Synonym(s): None Product Name : S General : Adhesive First Issue : Apr. 13. 2016 Company Identification :

SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT CAS. NO EINCI. NO % BY WEIGHT(APPROX.) Ethyl Cyanoacrylate 7085-85-0 230-391-5 87.2% Polymethyl Methacrylate 9011-14-7 NONE 9% CI 77266 1333-86-4 215-609-9 3.8%

SECTION 3 – HAZARDS IDENTIFICATION EMERGENCY OVERVIEW Vapor is irritating to eyes, skin and mucous membranes and respiratory tract.

POTENTIAL HEALTH EFFECTS May caused sensitization by inhalation, Narcotic effects, headache, dizziness, vomiting.
Skin : Dryness Eye : Irritation

POTENTIAL ENVIRONMENTAL EFFECTS: Not available.

SIGN AND SYMPTOMS OF EXPOSURE: Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and repeated over exposure to vapors may cause symptoms of non-allergic asthma in sensitive individuals.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: None Known

SECTION 4 – FIRST AID MEASURES Ingestion : Ingestion is not likely. See supplemental page for emergency procedures. Inhalation : Evacuate from further exposure. If unconsciousness occurs, see immediate medical assistance and call a physician. If the breath has stopped, have artificial respiration. If breathing difficulty occurs, have oxygen inhalation. Skin contact : Remove contaminated clothing. Wash contact areas with soap and water. Eye contact : Flush with water thoroughly for at least 15 minutes. Seek immediate medical assistance.

SECTION 5 – FIRE FIGHTING MEASURE

Flash Point : above 115°C Method: Cleveland open cup. (Recommended) Extinguishing Agents : Carbon dioxide, foam, dry chemical
Special Firefighting Procedures: Not Available Hazardous Products Formed by fire or thermal decomposition: Irritating organic fragments Unusual fire or explosion hazards: None Explosive Limits : (% by volume in air) Lower Not available : (% by volume in air) Upper Not available

SECTION 6 – ACCIDENTAL RELEASE MEASURES Evacuate non-essential personnel. Shut off all sources of ignition: No fires, smoking or flames in area. * Ventilate area after material pick up is completed.

For small spill: Absorb spill with inert material (dry cloth, dry sand), then place in a chemical waste containers using non- sparking tools. Flush residual spill (area) with plenty of water. For large spill: Dike for later disposal. Wash with plenty of water.

SECTION 7 – HANDLING AND STORAGE HANDLING: Keep away from sources of ignition and heat. No smoking or flames in working area. Take precautionary measures against static discharges. Wear proper protective equipment, and avoid contact with skin or eyes. Use only in well ventilated areas. Use exhaust ventilation to keep air concentration below exposure limit. Keep container tightly closed when not in use. Install emergency showers and eye wash facility in working area.

STORAGE: Keep away from possible source of ignition. Store in cool, dry and well ventilated location. Keep container tightly closed. Keep away from combustible materials, hear, and steam pipe or sunlight. Keep away from oxidizing materials.

OTHER PRECAUTIONS: Wash hands, face and gargle after work. Practice good personal hygiene after using this material, especially before eating, drinking, smoking or using the rest room. Keep out of reach of children.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION Respiratory protection (Specify type): Chemical Cartridge respirator with organic vapor Ventilation Local exhausts Should be used control vapors in work area. Mechanical (general) Should use a breathing mask Protective gloves: Polyethylene gloves. No rubber Eye protection Safety glasses, face shield. Skin Protection: Other protective clothing or equipment impervious Clothing apron and boots barrier cream ETC.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES Appearance : Black Liquid Odor : Sharp, irritating Boiling Point : Above 190°C (374. F) Melting Point : N/A Specific Gravity (H₂O = 1) : 0.9-1.1 Vapor Pressure (at 25°C) : 1Pa Vapor Density (Air =1) : 4.5 Evaporation Rate (Butyl acetate =1) : N/A Solubility in Water: Insoluble (Polymerized by water)

SECTION 10 – STABILITY AND REACTIVITY Condition to avoid : High humidity, high temperature or direct sunlight Stability : Stable (Cool and dry area) Material to avoid : Polymerized by contact with water, alcohols, amines or alkalis. Hazardous Decomposition or by Products: CO₂, Oxides, Nitrogen and unknown Hydrocarbons.

SECTION 11 – TOXICOLOGICAL INFORMATION Toxicity : Skin contact may cause burns, bond skin rapidly and strongly skin and eye irritant

Routes of Entry: Inhalation (Yes), Skin (Yes), Ingestion (Yes). Ingredients which have exposure limits ACGIH (TLV) OSHA (PEL) OTHER Ethyl Cyanoacrylate 0.2ppm TWA None

Literature Referenced Carcinogen Ingredients Target Organ and Other health Effects NTP IARC OSHA Ethyl Cyanoacrylate ALG IRR RES No No No

Abbreviations N/A Not applicable AC3 ACGIH animal Carcinogen ALG Allergen BLO Blood BNM Bone Marrow CNS Central Nervous System EYE Eyes IMM Immune system IRR Irritant LIV Liver MUT Mutagen Res Respiratory

SECTION 12 – ECOLOGICAL INFORMATION No date Available.

SECTION 13 – DISPOSAL CONSIDERATIONS Waste disposal method: Don't pour drain. Follow domestic and local environmental regulations. Precautions to be taken in handling and storing: Avoid unnecessary exposure to air and moisture. Don't store above 25°C and in direct sunlight. Keep container lids tightly closed. Other Precautions: Wear recommended equipment to avoid contact with skin and eyes. Protect eyes, skin and clothing from contact with liquid product.

SECTION 14 – TRANSPORTATION INFORMATION U.S Department of Transportation Ground Transport (49 CFR 172) Proper Shipping Name : Unrestricted (Not more than 450 liters.) Combustible liquids n.o.s. (Cyanoacrylate ester) (More than 450 liters) Hazard class or division : Unrestricted (Not more than 450 liters.) Combustible liquids (More than 450 liters) Identification number : None (Not more than 450 liters.) NA1993 (More than 450 liters) Marine Pollutant : None International Air Transportation (ICA/IATA) Proper shipping name : Unrestricted Class or Division : Unrestricted UN or ID number : None Water Transportation (IMO/IMDG) Proper Shipping Name : Unrestricted Hazard class or division: None Identification Number : None Marine Pollutant : None

SECTION 15 – REGULATORY INFORMATION CA Proportion 65: No California Proposition 65 chemicals are known to be present. TSCA 8(b) Inventory Status: All components are listed or are exempt from listing on Toxic Substances Control Act Inventory EINECS All components are listed on EINECS

SECTION 16 – OTHER INFORMATION Estimated NFPA(R) Code: Health Hazard : 1 Fire Hazard : 1 Reactivity Hazard : 1 Specific Hazard : Does not apply

Estimated HMIS(R) Code: Health Hazard : 1 Flammability Hazard : 1

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