Date Issued : 10/10/2014 MSDS No : ZAP-A-GAP Date-Revised : 08/15/2018 Revision No : 15

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: ZAP-A-GAP/CA+ (11730004_PT01, 11730006_PT02, 11730008_PT03, 11730011_PT04, 11730013_PT05)

MANUFACTURER

Pacer Technology 3281 E. Guasti Rd., Suite 260 Ontario, CA 91761 Emergency Contact: CHEMTREC Emergency Phone: 800-424-9300 Alternate Emergency Phone: 703-527-3887 Product Stewardship: 909-987-0550 24 HR. EMERGENCY TELEPHONE NUMBERS CHEMTREC (800) 424-9300

IMPORTER

The Hobby Headquarters 32/398 The Boulevarde Kirrawee, 2232

02 9545 1944

info@hhq.com.au Emergency Telephone Number: Australia 1800 033 111

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2A Skin Irritation, Category 2 Target Organ Toxicity (Single exposure), Category 3 Skin Sensitization, Category 1

Physical:

Flammable Liquids, Category 4

GHS LABEL ELEMENTS

Note: If this product is a consumer product it is labelled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labelling of consumer products take precedence over OSHA labelling so the actual product label will not contain the OSHA label elements shown below on this SDS.



SIGNAL WORD: WARNING



HAZARD STATEMENTS

H227: Combustible liquid.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

PRECAUTIO NARY STATEMENT(S)

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash skin and hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P313: Get medical advice/attention.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing.

P370: In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.

Disposal:

P501: Dispose of in a manner consistent with federal, state, and local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED: Skin contact through clothing may cause burns.



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3. COMPOSITION / INFORMATIO N ON INGREDIENTS

Chemical Name	Wt.%	CAS
ETHYL-2-CYANO ACRYLATE	85 - 100	7085-85-0
Polymethyl methacrylate	10 - 30	9011-14-7
Hydroquinone	< 0.1	123-31-9

4. FIRST AID MEASURES

EYES: Immediately flush eyes with large quantities of water for several minutes, while holding eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation or bonding occurs.

SKIN: Wash with soap and water. Peel or roll skin apart.

INGESTION: Peel or roll skin apart. Adhesive becomes solid in contact with saliva and may adhere to inside of mouth. Saliva will lift adhesive in 1-2 days. Avoid swallowing solid adhesive after detachment. Not a toxic product.

INHALATION: Remove to fresh air. Prolonged or repeated elevated exposure may cause allergic reactions with asthma-like symptoms in sensitive individuals.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes serious eye irritation. Will bond eyelids. Will cause excessive tearing.

- **SKIN:** Bonds skin in seconds. May cause skin irritation. May cause sensitization by skin contact. Cyanoacrylates generate heat on polymerization, so very large amounts will burn the skin.
- **INGESTION:** Adhesive becomes solid in contact with saliva and may adhere to inside of mouth. Saliva will lift adhesive in 1-2 days. Not a toxic product.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.



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ACUTE EFFECTS: Avoid exposure to vapor concentration in confined areas. CHRONIC EFFECTS: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Combustible liquid and vapor. Product polymerized to solid by water.

EXTINGUISHING MEDIA: Use dry chemical extinguisher or flush with large amounts of water.

HAZARDOUS COMBUSTION PRODUCTS: Can burn in fire, releasing irritating vapours

EXPLOSION HAZARDS: None known.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

FIRE EXPLOSION: None known.

SENSITIVE TO STATIC DISCHARGE: None known.

SENSITIVITY TO IMPACT: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustible by-products of carbon monoxide/dioxide.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Polymerize with water. Solid material may be scraped from surface.

LARGE SPILL: Polymerize with water. Increase ventilation to area. Solid material may be scraped from surface.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Use with adequate ventilation. Avoid contact with eyes, skin and clothing.

HANDLING: Avoid breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes and clothing. Keep container closed when not in use.

STORAGE: Store in a cool place in original container and protect from sunlight. Keep away from sources of ignition.

STORAGE TEMPERATURE: Ideal storage: 41-50F (5-10C)

SHELF LIFE: One year from the date of shipment from Pacer Technology, unless otherwise noted.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION



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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
	EXPOSURE LIMITS				
Chemical Name	Туре		ppm	mg/m³	
ETHYL-2-CYANO ACRYLATE	OSHA PEL	TWA	[1]	[1]	
	ACGIH TLV	TWA	0.2	1.0	
	Supplier OEL	TWA	0.2 ppm		
Hydroquinone	OSHA PEL	TWA		2	
OSHA TABLE COMMENTS:					

1. NL = Not Listed

ENGINEERING CONTROLS: Use only in a well-ventilated area. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

SKIN: Use Nitrile gloves and aprons to prevent contact. Do not use PVC, Nylon or Cotton materials.

RESPIRATORY: Use only in a well-ventilated area. In case of insufficient ventilation, wear suitable respiratory equipment. Recommended: Full-face NIOSH-approved respirator with organic vapor cartridge.

WORK HYGIENIC PRACTICES: Avoid direct contact and breathing vapor. Use with adequate ventilation. Wash hands with soap and water after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Characteristic odour, intensely irritating. **ODOR THRESHOLD:** Odour Threshold = 1 ppm **APPEARANCE:** Transparent, colourless liquid. **pH:** No data available

PERCENT VOLATILE: No data available

FLASHPOINT AND METHOD: 80°C (176°F) to 93.4°C (200°F) TAG CC

FLAMMABLE LIMITS: No data available

AUTOIGNITION TEMPERATURE: 485°C (905°F)

VAPOR PRESSURE: < 0.2 mm Hg

VAPOR DENSITY: No data available

BOILING POINT: > 149°C (300°F)

FREEZING POINT: No data available

MELTING POINT: No data available

THERMAL DECOMPOSITION: No data available



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SOLUBILITY IN WATER: Insoluble

PARTITION COEFFICIENT: N-OCTANOL/WATER: No data available

EVAPORATION RATE: No data available

DENSITY: No data available

SPECIFIC GRAVITY: 1.07 g/mL at 25°C

VISCOSITY #1: 80 to 120 Centipoise at 22°C (72°F)

MOLECULAR WEIGHT: No data available

(VOC): < 20.00 g/L Per SCAQMD Method 316B.

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATIO N: No

CONDITIONS TO AVOID: Avoid temperatures above 176° F (80° C), moisture and alkalines.

POSSIBILITY OF HAZARDOUS REACTIONS: Possible polymerization reaction in the presence of water, amines, alkalis and alcohols.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide and other toxic or irritating compounds may form when heated to decomposition. Oxides of nitrogen and probably hydrogen cyanide are also possible.

INCOMPATIBLE MATERIALS: Polymerized by water, alcohol, amines, alkaline materials.

COMMENTS: REACTIVITY: Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
ETHYL-2-CYANO ACRYLATE	> 5000 mg/kg	> 2000 mg/kg
Hydroquinone	367.3 mg/kg	> 2000 mg/kg

DERMAL LD₅₀: > 2000 mg/kg

Notes: (Estimated)

ORAL LD₅₀: > 5000 mg/kg

Notes: (Estimated)

INHALATION LC₅₀: Vapours may be irritating. Recommended TWA

0.2ppm. RESPIRATORY OR SKIN SENSITISATION: Possible skin sensitizer.

CARCINOGENICITY

IARC: None known

NTP: None known

OSHA: None known

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATIO N)

PROPER SHIPPING NAME: NOT REGULATED

AIR (ICAO/IATA)

SHIPPING NAME: ID8000, CONSUMER COMMODITY, 9 (PKG LESS THAN OR EQUAL TO 30 kg G); or UN3334, AVIATION REGULATED LIQUID, N.O.S (ETHYL CYANOACRYLATE), 9, III (LTD QTY, IP VOL LESS THAN OR EQUAL TO 5.0 L, OP WGT LESS THAN OR EQUAL TO 30 kg G) *

VESSEL (IMO/IMDG)

SHIPPING NAME: NOT REGULATED

COMMENTS: * This product may be shipped as EXCEPTED QUANTITIES OF CLASS 9, UN3334 (IP VOL LESS THAN OR EQUAL TO 0.03 L, OP VOL LESS THAN OR EQUAL TO 1.0 L)

The transport information provided in this section only applies to the material formulation/itself and is not specific to any package/configuration. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organizations to follow all applicable laws, regulations, and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate Health, Delayed Health, Fire, Reactive.

313 REPORTABLE INGREDIENTS: None above reporting de minimis.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None above reporting de minimis.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

С	Chemical Name	CAS
E	THYL-2-CYANO ACRYLATE	7085-85-0
P	Polymethyl methacrylate	9011-14-7
F	łydroquinone	123-31-9

TSCA STATUS: All components are listed on or are exempt from listing on the Toxic Substances Control Act.

CLEAN AIR ACT

40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION: Not applicable.

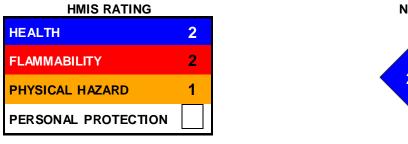
CALIFORNIA PROPOSITION 65: Consumer sizes of this product do not require a California Proposition 65 Warning based on potential exposure in normal consumer use. The following information applies to industrial use: **WARNING:** This product can expose you to chemicals including Sulphur Dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <u>www.P65Warnings.ca.gov</u>.



APPROVED BY: Pacer Technology Regulatory Department

PREPARED BY: Pacer Technology Regulatory Department Date-Revised: 08/15/2018

REVISION SUMMARY: This MSDS replaces the 08/02/2017 MSDS. Revised: Section 1: MSDS No. Section 15: CALIFORNIA PROPOSITION 65.



MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, Pacer Technology does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

