SAFETY DATA SHEET

Date issued : 10/10/2014
SDS number : 11730057_PT26
Date revised : 08/01/2023
Revision number : 18

1. Identification

Product code: 11730057_PT26
Product description: ZAP GEL 1OZ (72)

Manufacturer / Supplier
Pacer Technology
3281 E. Guasti Road, Suite 260
Ontario, CA 91761
Emergency contact: Chemtrec
Emergency Phone: (800) 424-9300
Customer Service: (909) 987-0550

Emergency telephone number (24 hour)
CHEMTREC (800) 424-9300

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Eye Irritation, Category 2A
Skin Irritation, Category 2
Specific Target Organ Toxicity Single Exposure (respiratory irritation)., Category 3

Physical hazards:

Flammable Liquids, Category 4

Label elements

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



Exclamation mark

Signal word: WARNING

Hazard statement(s)

H227: Combustible liquid.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary 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:

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P302+P352: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
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. Keep cool. Store locked up.

Disposal:

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

Hazards not otherwise classified:

Bonds skin and eyes instantly. Do not get in eyes, in mouth or on skin. Skin contact through clothing may cause burns. If spilled on clothing, flush with water immediately, do not remove, contact a physician.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
ETHYL-2-CYANOACRYLATE	85 - 100	7085-85-0
Polymethyl methacrylate	10 - 30	9011-14-7
Hydroquinone	< 0.1	123-31-9

4. First-aid measures

Eye: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

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

Ingestion: Flush lips with warm after to release lips if bonded. Ingestion is unlikely, though the product may stick in the mouth. Over a period of 1-2 days, the product will be loosened by saliva. Avoid swallowling the product. Get medical attention if symptoms occur.

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

Most important symptoms and effects, both acute and delayed

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

Skin: Flush skin with water for several minutes. If bonded, immerse bonded areas in warm, soapy water for several minutes. Peel or roll skin or bonded material apart. Get medical attention if irritation occurs. Remove and launder clothing before re-use.

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.

Acute effects: Avoid exposure to vapor concentration in confined areas.

5. Fire-fighting measures

General hazard: Combustible liquid and vapor.Product polymerized to solid by water.

Suitable extinguishing media: Use dry chemical extinguisher or flush with large amounts of water.

Hazardous combustion products: Can burn in fire, releasing irritanting vapors

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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.

Sensitivity to static discharge: None known.

Sensitivity to mechanical 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.

Precautions for safe handling: Avoid breathing (dust, vapor, mist, gas).

Conditions for safe storage: Store in a cool place in original container and protect from sunlight.

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

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
ETHYL-2-CYANOACRYLATE	**ACGIH TLV**	**STEL**	1	
		TWA	0.2	
Hydroquinone	**OSHA PEL**	**TWA**		2

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Individual protection measures, such as personal protective equipment

Eye / face protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin protection - hand protection: Use Nitrile gloves and aprons to prevent contact. Do not use PVC, Nylon or Cotton materials.

Respiratory protection: 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.

Occupational hygiene 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

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Physical state: Liquid

Appearance: Transparent, colorless liquid.

Odor: Characteristic odor, intensely irritating.

Odor threshold: Odor Threshold = 1 ppm

pH: Not Established

Melting point: No data available

Freezing point: -22 C (-7.6 F)

Initial boiling point and boiling range: > 149°C (300°F)

Flash point: 83°C (181.4°F) TAG CC

Evaporation rate (n-butyl acetate = 1): No data available

Explosion limit / flammability limit notes: Not Established

Vapor pressure: < 0.2 mm Hg

Relative vapor density: No data available

Density: Not Established

Relative density: 1.12 g/mL at 25°C

Solubility: Insoluble

Partition coefficient n-octanol/water (logarithmic value): No data available

Auto-ignition temperature: 485°C (905°F)

Decomposition temperature: Not Established

Dynamic viscosity: 20,000 to 50,000 Centipoise at 22°C (72°F)

Molecular weight: Not Established

Percent volatiles: No data available

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

10. Stability and reactivity

Reactivity: Thermal decomposition will produce oxides of carbon and nitrogen, trace amounts of hydrogen cyanide and other toxic or irritating compounds.

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.

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)
ETHYL-2-CYANOACRYLATE	> 5000 mg/kg	> 2000 mg/kg
Hydroquinone	367.3 mg/kg	> 2000 mg/kg

Acute dermal toxicity LD_{50}: > 2000 mg/kg

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Notes: (Estimated)

Acute oral toxicity LD_{50}: > 5000 mg/kg

Notes: (Estimated)

Acute inhalation toxicity LC_{50}: Vapors may be irritating. Recommended TWA 0.2ppm.

Respiratory or skin sensitization: No data available for the mixture. Testing for skin sensitization is technically not feasible. The adhesive bonds instantaneously to the surface of the skin and polymerizes. The polymerized material is not able to penetrate into the epidermis. Two comparable structural hoomologues, methyl-2-cyanoacrylate and butyl-2-cyanoacrylate were tested in animals without inducing skin sensitization.

Germ cell mutagenicity: Ethyl-2-cyanoacrylate was negative in the bacterial reverse mutation assays, a mammalian chromosome abberation test and in a mouse lymphoma test.

Carcinogenicity

IARC: None

NTP: None

OSHA: None

Notes: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH, and the EU CLP.

12. Ecological information

Ecotoxicological information: Ethyl-2-Cyanoacrylate: Aquatic toxicity studies are not technically feasible since this substance rapidly polymerizes in the prence of water.

Bioaccumulative potential: Bioaccumulation studies are not technically feasible since this substance rapidly polymerizes in the presence of water.

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

13. Disposal considerations

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

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: NOT REGULATED

ICAO / IATA - air

UN proper 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) *

IMO / IMDG - International

UN proper 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

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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 Section 311/312 Hazard Categories

311/312 Health hazards: Refer to Section 2 for the OSHA Hazard Classification.

313 reportable ingredients: None above reporting de minimus.

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status: None above reporting de minimus.

TSCA (The Toxic Substances Control Act)

Chemical name	CAS No.
ETHYL-2-CYANOACRYLATE	7085-85-0
Polymethyl methacrylate	9011-14-7
Hydroquinone	123-31-9

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

CAA 112(b) Hazardous Air Pollutants

CAA 112(r) List of Substances for Accidental 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 Sulfur Dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

16. Other information

Approved by: Pacer Technology Regulatory Affairs Department

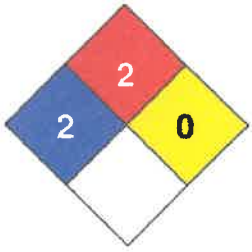
Prepared by: Pacer Technology Regulatory Affairs Department **Date revised:** 08/01/2023

Revision summary: This SDS replaces the 05/25/2021 SDS. Revised: **Section 1:** SDS number. **Section 2:** Classification of the substance or mixture, Label elements, Precautionary statement(s). **Section 9:** Flash point.

HMIS rating

Health	2
Flammability	2
Physical hazard	0
Personal protection	

NFPA codes



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.