

SAFETY DATA SHEET



Date Issued : 08/01/2018
MSDS No : ANL-22

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: ANL-22 (11740094_FG06112)

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

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity, Category 4
Carcinogenicity, Category 2
Eye Damage, Category 1
Germ Cell Mutagenicity, Category 2
Skin Corrosion, Category 1B
Skin Sensitization, Category 1
Target Organ Toxicity (Repeated exposure), Category 2
Target Organ Toxicity (Single exposure), Category 3

Physical:

Not Classified

GHS 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.



Corrosion



Health
hazard



Exclamation
mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.
H341: Suspected of causing genetic defects.
H350: Suspected of causing cancer.
H373: May cause damage to kidneys through prolonged or repeated exposure by ingestion.

PRECAUTIONARY STATEMENT(S)

SAFETY DATA SHEET



Date Issued : 08/01/2018

MSDS No : ANL-22

General:

- P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.

Prevention:

- P272: Contaminated work clothing must not be allowed out of the workplace.
 P260: Do not breathe dust/fume/gas/mist/vapors/spray.
 P270: Do not eat, drink or smoke when using this product.
 P271: Use only outdoors or in a well-ventilated area.
 P264: Wash thoroughly after handling.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P305+310+P338+351: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
 P303+P361+P353+P364: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.
 P304+P312+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
 P301+P330+P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
 P308+P313: IF exposed or concerned: Get medical advice/ attention.

Storage:

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

Disposal:

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyethylene Glycol Dimethacrylate	0 - 60	25852-47-5
Trimethylolpropane trimethacrylate	0 - 60	3290-92-4
2-HYDROXYETHYL METHACRYLATE	> 25.4043	868-77-9
Hydroxypropyl methacrylate	≥ 12.9495	27813-02-1
2-Propenoic acid	0 - 10	79-10-7
Saccharin	≤ 5	81-07-2
Ethylene glycol	< 5	107-21-1
2,6-di-tert-butyl-p-cresol	< 5	128-37-0
Titanium dioxide	< 5	13463-67-7
Maleic acid	< 5	110-16-7
Benzoquinone	< 5	106-51-4
Cumene Hydroperoxide	0.8 - 0.9	80-15-9

SAFETY DATA SHEET



Date Issued : 08/01/2018

MSDS No : ANL-22

Cumene

< 5 - 0.155

98-82-8

4. FIRST AID MEASURES

EYES: Immediately flush thoroughly with water for 20 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses if present and easy to do. Get immediate medical attention.

SKIN: Immediately flush skin with plenty of water for 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Launder clothing before re-use. (Discard contaminated shoes).

INGESTION: Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

INHALATION: Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes severe eye irritation.

SKIN: Causes sever skin irritation and burns. May cause skin sensitization.

INGESTION: Harmful if swallowed. May be fatal if swallowed.

INHALATION: Inhalation of vapors will cause severe respiratory tract irritation with possible burns.

CHRONIC EFFECTS: Prolonged exposure by ingestion may damage the kidneys.

ADDITIONAL INFORMATION: This product contains ingredients that are suspected of causing cancer and genetic defects. Immediate medical attention is required for all routes of exposure.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: This product is not flammable but may burn under fire conditions. Combustion will produce oxides of carbon and nitrogen, and other irritating organic vapors.

EXTINGUISHING MEDIA: Use water spray, foam, dry chemical, or carbon dioxide when fighting fires involving this material.

FIRE FIGHTING EQUIPMENT: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool exposed intact containers with water spray. Contain water used in fire fighting from entering sewers or natural waterways.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid release to the environment.

LARGE SPILL: Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid release to the environment.

GENERAL PROCEDURES: Evacuate spill area and keep unprotected personnel away. Prevent contact with eyes, skin or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Do not breathe vapors. Ventilate area.

7. HANDLING AND STORAGE

HANDLING: Do not breathe vapors. Use with adequate ventilation. Prevent contact with the eyes, skin, and clothing. Always wear impervious gloves, chemical safe goggles and protective clothing when handling this material. Wash thoroughly after handling. Do not eat, drink, or smoke in the work area. No smoking in storage or use areas. Keep containers closed when not in use.

STORAGE: Store in a container in a cool, well-ventilated location away from oxidizer and other incompatible materials. Keep

SAFETY DATA SHEET



Date Issued : 08/01/2018

MSDS No : ANL-22

container tightly closed when not in use. Keep in original container. Suggested storage temperature 8-38C (46.5-100F).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	EXPOSURE LIMITS			
	Type	ppm	mg/m ³	
Trimethylolpropane trimethacrylate	AIHA WEEL (skin)	TWA		1
2-Propenoic acid	ACGIH TLV (skin)	TWA	2	
		STEL	2	
Ethylene glycol		TWA	25	
		STEL (vapor fraction) ACGIH TLV	50	
2,6-di-tert-butyl-p-cresol		TWA ACGIH TLV (Inhalable fraction and vapor)		2
Titanium dioxide	ACGIH TLV	TLV		10
	OSHA PEL	PEL	[1]	15 [1]
Benzoquinone	OSHA PEL	TWA	0.1	0.4
	ACGIH TLV	TWA	0.1	0.44
Cumene Hydroperoxide	AIHA WEEL (skin)	TWA	1	
Cumene	ACGIH TLV	TWA	50	
	OSHA PEL (skin)	TWA	50	
OSHA TABLE COMMENTS:				
1. Total dust.				

ENGINEERING CONTROLS: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical safety goggles and face shield recommended.

SKIN: Impervious gloves are required for all operations where skin contact can occur. Contact your glove supplier for selection assistance.

RESPIRATORY: In operations where the occupational exposure limits are exceeded, and approved respirator with applicable cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

PROTECTIVE CLOTHING: Impervious clothing is required to prevent skin contact and contamination of personal clothing. An eye wash facility and safety shower should be available in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild odor

ODOR THRESHOLD: No data available

SAFETY DATA SHEET



Date Issued : 08/01/2018
MSDS No : ANL-22

APPEARANCE: Purple Liquid
pH: 3-6
FLASHPOINT AND METHOD: > 93°C (199.4°F)
FLAMMABLE LIMITS: No data available
AUTOIGNITION TEMPERATURE: No data available
VAPOR PRESSURE: <0.13 mbar @25C (77F)
VAPOR DENSITY: No data available
BOILING POINT: > 148 C (>298.4 F)
FREEZING POINT: No data available
MELTING POINT: No data available
THERMAL DECOMPOSITION: No data available
SOLUBILITY IN WATER: Poorly soluble in water
PARTITION COEFFICIENT: N-OCTANOL/WATER: No data available
EVAPORATION RATE: No data available
RELATIVE DENSITY: 1.05 g/cm³
VISCOSITY: No data available

10. STABILITY AND REACTIVITY

REACTIVITY: May react with incompatible materials.
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.
STABILITY: Stable under normal storage and handling conditions.
CONDITIONS TO AVOID: Keep away from heat and open flames.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition will produce oxides of carbon and nitrogen and other irritating organic vapors.
INCOMPATIBLE MATERIALS: Oxidizing agents, inert gases, amines, and metallic salts.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

SAFETY DATA SHEET



Date Issued : 08/01/2018

MSDS No : ANL-22

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Polyethylene Glycol Dimethacrylate	> 2000 mg/kg		
2-HYDROXYETHYL METHACRYLATE	5564 mg/kg	> 5000 mg/kg	
2-Propenoic acid		640 mg/kg (rabbit)	3.6 mg/L per 4 hr (rat)
Ethylene glycol	> 500 mg/kg (rat)	10626 mg/kg (rabbit)	
2,6-di-tert-butyl-p-cresol	890 mg/kg (rat)	> 2000 mg/kg (rat)	
Titanium dioxide	> 2000 mg/kg (rat)	> 10000 mg/kg (rabbit)	3.43 mg/L/4hr (no mortality)
Maleic acid	1030 mg/kg (rat)	1560 mg/kg (rabbit)	
Benzoquinone	130 mg/kg (rat)		
Cumene Hydroperoxide	382 mg/kg (rat)	1200 to 1520 mg/kg (rat)	220 ppm per 4 hr (rat)

NOTES:

Product ATE: 1120-1630 mg/kg (oral), >5000 mg/kg (skin), 31 mg/L (inhalation, as vapor), 6 mg/L (inhalation, as mist)

Polyethylene Glycol Dimethacrylate: Oral rat LD50: >2000 mg/kg

Trimethylolpropane trimethacrylate: Oral rat LD50: >2000 mg/kg, Skin rat LD50: >2000 mg/kg

2-Hydroxyethyl methacrylate: Oral rat LD50: 5564 mg/kg, Skin rabbit LD50: >5000 mg/kg

Hydroxypropyl methacrylate: Oral rat LD50: >2000 mg/kg, Skin rabbit LD50: >5000 mg/kg

Acrylic acid: Oral rat LD50: 357 mg/kg, Inhalation rat LC50: >5.1 mg/L/4hr (as vapor), Skin rabbit LD50: 997.5 mg/kg

Saccharin: Oral rat LD50: 8440-9710 mg/kg, Skin rabbit LD50: 4694 mg/kg

Ethylene glycol: Oral rat LD50: 500 mg/kg (point estimate), Inhalation rat LC50: >2.5 mg/L/6hr, Skin mouse LD50: >3500 mg/kg

2, 6-Di-tert-butyl-p-cresol: Oral rat LD50: 890 mg/kg, Skin rat LD50: >2000 mg/kg

Titanium dioxide: Oral rat LD50: >2000 mg/kg, Inhalation rat LD50: 3.43 mg/L/4hr (no mortality)

Maleic acid: Oral rat LD50: 1030 mg/kg, Skin rabbit LD50: 1560 mg/kg

Benzoquinone: Oral rat LD50: 130 mg/kg, Inhalation rat LC50: 11 mg/L (point estimate)

Cumene hydroperoxide: Oral rat LD50: 382 mg/kg, Inhalation rat LC50: 220 ppm/4hr (1.37 mg/L) (as vapor), Skin rat LD50: 1200-1520 mg/kg

Cumene: Oral rat LD50: 2260 mg/kg, Skin rabbit LD50: >3160 mg/kg

SKIN CORROSION/IRRITATION: Causes severe skin irritation and burns. May cause allergic skin reaction (sensitization).

SERIOUS EYE DAMAGE/IRRITATION: Causes severe irritation and burns. Permanent eye injury is likely.

RESPIRATORY OR SKIN SENSITISATION: Inhalation of vapors may cause severe mucous membrane and respiratory irritation and burns.

CARCINOGENICITY

Chemical Name	IARC Status
Saccharin	3
2,6-di-tert-butyl-p-cresol	3
Benzoquinone	3

NOTES: Titanium dioxide is listed as Possible Carcinogen to Humans (Group 2B) by IARC. Cumene is listed as Possible Carcinogen to Humans (Group 2B) by IARC and Reasonably Anticipated to Be a Human Carcinogen by NTP. None of the other components of this product above 0.1% are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.

ASPIRATION HAZARD: Harmful if swallowed. Swallowing may cause severe irritation and burns to the mouth, throat, and gastrointestinal tract, abdominal pain, vomiting, diarrhea and collapse.

SAFETY DATA SHEET



Date Issued : 08/01/2018
MSDS No : ANL-22

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

Persistence and Degradability: Polyethylene Glycol Dimethacrylate: Not readily biodegradable. Acrylic acid: Readily biodegradable- 68% in 14 days. 2, 6-Di-tert-butyl-p-cresol: Not readily biodegradable.

ECOTOXICOLOGICAL INFORMATION:

Trimethylolpropane trimethacrylate: 96 hr LC50 Rainbow trout: 2 mg/L, 48 hr EC50 Daphnia magna: >9.22 mg/L, 32 day NOEC Fathead minnow: 0.138 mg/L

2-Hydroxyethyl methacrylate: 96 hr LC50 Japanese Rice Fish: >100 mg/L, 48 hr EC50 Daphnia magna: 380 mg/L

Hydroxypropyl methacrylate: 96 hr LC50 Scophthalmus maximus: 833 mg/L, 48 hr EC50 Daphnia magna: >143 mg/L, 21 days NOEC Daphnia magna: 45.2 mg/L

Acrylic acid: 96 hr LC50 Rainbow trout: 27 mg/L, 96 hr NOEC Rainbow trout: 6.3 mg/L, 48 hr EC50 Daphnia magna: 95 mg/L, 21 day NOEC Daphnia magna: 7-12 mg/L, 72 hr EC50 Desmodemus subspicatus (green algae): 0.205 mg/L

Ethylene glycol: 96 hr LC50 Fathead minnow: >100 mg/L

2, 6-Di-tert-butyl-p-cresol: 96 hr LC50 Zebra fish: >0.57 mg/L, 48 hr EC50 Daphnia magna: 0.48 mg/L, 30 day NOEC Japanese Rice Fish: 0.053 mg/L, 21 days NOEC Daphnia magna: 0.069 mg/L

Maleic acid: 96 hr LC50 Rainbow trout: 75 mg/L, 48 hr EC50 Daphnia magna: 42.81 mg/L, 21 day NOEC Daphnia magna: 10 mg/L

Benzoquinone: 48hr EC50 Daphnia magna: 0.13 mg/L, 72 hr EC50 Desmodemus subspicatus: 1.5 mg/L

Cumene hydroperoxide: 96 hr LC50 Rainbow trout: 3.9 mg/L, 48 hr EC50 Daphnia magna: 18.84 mg/L

Cumene: 96 hr LC50 Rainbow trout: 4.8 mg/L, 48 hr EC50 Daphnia magna: 2.14 mg/L, 28 day NOEC Zebra fish: 0.38 mg/L, 21 days NOEC Daphnia magna: 0.35 mg/L

This product is expected to be very toxic to the aquatic environment and toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

BIOACCUMULATION/ACCUMULATION: No data available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: NOT REGULATED (Vol capacity < 450L)

AIR (ICAO/IATA)

SHIPPING NAME: ID8000, CONSUMER COMMODITY, 9 (IP VOL LESS THAN OR EQUAL TO 0.5 L); or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (acrylic acid, maleic acid), 9, III (LTD QTY, IP VOL LESS THAN OR EQUAL TO 5.0 L)*

VESSEL (IMO/IMDG)

SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (acrylic acid, maleic acid), 9, III (LTD QTY, IP VOL LESS THAN OR EQUAL TO 5.0 L)*

COMMENTS: * This product may be shipped as EXCEPTED QUANTITIES OF CLASS 9, UN3082 (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.

SAFETY DATA SHEET



Date Issued : 08/01/2018
MSDS No : ANL-22

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)


313 REPORTABLE INGREDIENTS: This product contains the following chemicals subject to SARA Title III Section 313
Reporting requirements: Ethylene Glycol (107-21-1) < 5%. Benzoquinone (106-51-4) < 5%, Cumene (98-82-8) 0.02-0.155%

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product has an RQ of 200 lbs (based on the RQ of Benzoquinone of 10 lbs present at < 5%).
Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All of the ingredients of this product are listed on the TSCA inventory or exempt.

CALIFORNIA PROPOSITION 65:  **WARNING:** This product can expose you to chemicals including Cumene, which is known to the State of California to cause cancer, and Ethylene Glycol, 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 Department

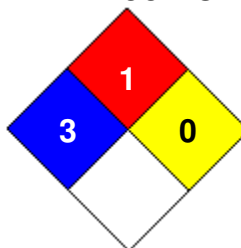
PREPARED BY: Pacer Technology Regulatory Department

Date Prepared: 08/01/2018

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
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.