

Section 1: Identification

PRODUCT IDENTIFIER: DIAMAT Polycrystalline and Monocrystalline Water-based Diamond suspensions

CHEMICAL FAMILY: Abrasive

EMERGENCY PHONE: CHEMTREC 800-424-9300 (US) Day or night
Customer No. 16568

MANUFACTURER: PACE Technologies
3601 E. 34th St., Tucson, AZ 85718
Tucson, Arizona USA
Phone: 520-882-6598
FAX: 520-882-6598

HMIS RATING: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

HAZARD RATING:

LEAST: 0 SLIGHT: 1 MODERATE: 2 HIGH: 3 EXTREME: 4

Section 2: Hazard(s) Identification

GHS CLASIFICATION:	Acute toxicity, oral (Category 4) - H302 Skin corrosion/irritation (Category 2) - H315 Serious eye damage / eye irritation (Category 2) - H319 Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3) - H335
PICTOGRAM(s):	 A red diamond-shaped hazard symbol containing a black exclamation mark, indicating a warning or caution.
SIGNAL WORD:	Warning
HAZARD STATEMENTS:	H315-Causes skin irritation H302-Harmful if swallowed H319-Causes eye irritation H335-May cause respiratory irritation
PRECAUTIONARY STATEMENTS:	P261-Avoid breathing P264- Wash skin thoroughly after handling. P270- Do not eat, drink or smoke when using this product. P271-Use only outdoors or in a well-ventilated area. P280- Wear protective gloves/protective clothing/eye protection/face protection. P301+312- IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

Copyright 2015-2025 © · All rights reserved

PACE Technologies · 3601 E. 34th St · Tucson, AZ 85713 USA
Telephone +1-520-882-6598 · FAX +1-520-882-6599 · pace@metallographic.com
Emergency phone number (CHEMTREC 800-424-9300)

	<p>P302+P352-IF ON SKIN: wash with plenty of soap and water. P304+P340-IF INHALED: Remove victim to fresh air and Keep at rest in a position 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. P330- Rinse mouth. P332+P313-IF SKIN irritation occurs: Get medical advice/attention. P337-P313-IF eye irritation persists: Get medical advice/attention. P362-Take off contaminated clothing and wash before reuse P403+P233- Store in a well-ventilated area P405- Store locked up. P501- Dispose of contents/container to Federal, State and Local Regulations</p>
--	--

EYE CONTACT: May cause irritation.

SKIN CONTACT: Repeated or prolonged skin contact may cause irritation.

INHALATION: Vapor and mist may irritate nose and throat. Prolonged inhalation may cause dizziness.

INGESTION: May cause gastrointestinal irritation. Nausea and vomiting may occur.

PRIMARY ROUTE(S) OF ENTRY: Inhalation at high temperatures, eye contact, skin contact.

TARGET ORGANS: Respiratory passages at high temperatures, eyes, skin.

MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE: Individuals with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of chemical.

CARCINOGENICITY: IARC, NTP, and OSHA do not list this product or its ingredients as carcinogens.

Section 3: Composition/Information on Ingredients

CHEMICAL NAME	APPROX %	COMMON NAME	REG* (Y/N)	CAS #
Diamond	0.2-5	Diamond	Y	1344-28-1
Polyethylene Glycol	0.075-0.1	PEG	N	111-46-6
Water	94-98	Water	N	7732-16-5
Surfactant	0.075-0.2	Surfactant	N	N/A

** Subject to EPA section 313 reporting SARA 40 CFR part 372

NE = None Established

Product formulation is Proprietary
No ingredients are known to be hazardous under normal usage.

Section 4: First-Aid Measures

EYE CONTACT: Flush thoroughly with water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing and shoes. Wash exposed area with soap and water. Get medical attention if symptoms persist.

INHALATION: No known harmful effects. If symptoms develop, remove affected person from source of exposure into fresh air. Get medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by a physician. Give large quantities of water or milk.

Section 5: Fire-Fighting Measures

FLASH POINT:	N/A
FLASH POINT METHODS:	N/A
LOWER FLAMMABLE LIMIT (LFL):	N/A
UPPER FLAMMABLE LIMIT (UFL):	N/A
EXTINGUISHING MEDIA:	CO2, Foam, Dry Chemical, Water Spray
UNUSUAL FIRE OR EXPLOSION HAZARDS:	None
HAZARDOUS COMBUSTION PRODUCTS:	Specific to type of material involved in fire.
FIRE-FIGHTING INSTRUCTIONS:	Wear a NIOSH approved positive pressure self-contained breathing apparatus with full protective clothing. Do not release runoff from fire control methods to sewers or waterways.
FIRE-FIGHTING EQUIPMENT:	Fire may produce toxic thermal decomposition products. Wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.

Section 6: Accidental Release Measures

SMALL SPILLS:	Isolate area and deny entry. Ventilate area of leak or spill. Small spill can be picked up with vermiculite or other absorbent, noncombustible material. Properly protected personnel should flush spill with plenty of water, taking care not to splash personnel.
----------------------	---

LARGE SPILLS: Notify appropriate personnel and implement facility emergency response plan. Evacuate nonessential personnel, and isolate area. Cleanup personnel should wear fully protective equipment for skin and eye contact.

CONTAINMENT: For large spills, dike far ahead of liquid spill for later disposal. Do not release directly into sewers or waterways. Wash walking surfaces thoroughly to reduce slipping hazard.

CLEANUP: Absorb spilled liquid with non-reactive absorbent material. Place clean-up material in appropriate disposal containers and dispose of according to local, state and federal requirements.

REGULATORY REQUIREMENT: Any release to the environment of this product may be subject to federal, state, and/or local reporting requirements. Check with appropriate agencies.

Section 7: Handling and Storage

HANDLING PRECAUTIONS: Exercise ordinary care in handling industrial lubricants. Avoid contamination of cigarettes or other tobacco products. Wash hands thoroughly before eating or smoking. Remove contaminated clothing and wash before reuse.

Users should be alert to the possibility that very small percentages of the population may display unexpected allergic reactions to otherwise innocuous industrial lubricants or raw materials.

STORAGE REQUIREMENTS: Do not store in open or unlabeled containers. Store in well ventilated, properly drained / contained site, away from heat, out of the sun, and away from combustibles and reactive chemicals. Use only approved containers and protect containers from damage and keep material from freezing.

Section 8: Exposure Controls/ Personal Protection

EYE PROTECTION: Avoid eye contact. Wear safety glasses or chemical goggles in accordance with OSHA 29 CFR 1910.133.

SKIN PROTECTION:	Avoid skin contact. Wear chemical protective gloves. Depending upon conditions of use, additional protection may be necessary such as a face shield, apron, etc.
VENTILATION:	Local ventilation is generally not necessary under normal conditions of use with adequate general ventilation. Ventilation and other forms of engineering controls are the preferred means for controlling chemical exposures.
RESPIRATORY PROTECTION:	Avoid breathing in mist. Respiratory protection is generally not necessary under normal conditions of use with adequate general ventilation.
SAFETY STATIONS:	Make emergency eyewash stations, safety / quick-drench showers, and washing facilities available in work area.
OTHER PRECAUTIONARY INFORMATION:	Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9: Physical and Chemical Properties

APPEARANCE: Colorless or light yellow	ODOR: Slight musky smell	pH VALUE: 7~9'
BOILING POINT: >100°C (of water)	FLASH POINT: >100°C for surfactant	SPECIFIC GRAV.: about 0.95-1.05
VAPOR PRESSURE: Water	SOLUBILITY.: Soluble in Water	VISCOSITY: ~300-350 cPS
EVAPORATION RATE: Water	WATER SOLUBLE.: Soluble	ORGANIC SOLVENT SOL.: Insoluble
pH: 9-11	APPEARANCE & ODOR: White cloudy liquid solution.	FLASH POINT.: N/A

Section 10: Stability and Reactivity

STABILITY:	Stable at room temperature in closed containers under normal storage and handling conditions.
POLYMERIZATION:	Surfactant may decompose to pyrogenic decomposition generating CO, CO ₂ , oxynitride, etc.
CHEMICAL INCOMPATIBILITIES:	Strong acids, strong bases
HAZARDOUS DECOMPOSITION PRODUCTS:	Steam, CO ₂ , CO and unidentified organic compounds in fumes and smoke may be formed during combustion.
CONDITIONS TO BE AVOIDED:	Strong acid, strong alkali and strong oxidizing agents. Avoid high temperature and fire.

Section 11: Toxicological Information

EYE EFFECT:	Avoid eye contact. May cause irritation, pain and swelling of the eyes, severe eye damage may lead to blindness. Wear safety glasses or chemical goggles in accordance with OSHA 29 CFR 1910.133.
SKIN EFFECT:	Cause local discomfort or pain.
REPRODUCTIVE:	Not reported.
INGESTION EFFECT:	May cause mouth, throat, esophagus stimulation, resulting in abdominal pain, chest pain, nausea, vomiting and diarrhea.
ACUTE INHALATION EFFECTS:	Irritate the upper respiratory tract.

ACUTE ORAL EFFECTS: Not reported.

CHRONIC EFFECTS: Not reported.

CARCINOGENICITY: Not reported.

MUTAGENICITY: Not reported.

TERATOGENICITY: Not reported.

Section 12: Ecological Information

ECOTOXICITY:: Not available.

SOIL ABSORPTION / MOBILITY Not available.

DEGRADABILITY: Liquid portion is biodegradable.

ENVIRONMENTAL FATE AND EFFECTS: Not available.

CONDITIONS TO BE AVOIDED: N/A

Section 13: Disposal Considerations

DISPOSAL: Contact a licensed waste-disposal contractor for detailed recommendations. Follow applicable Federal, State, and Local regulations.

CONTAINER DISPOSAL: Rinse three times with an appropriate solvent or water. Dispose or

recycle the empty container.

**DISPOSAL REGUALTORY
REQUIREMENTS:**

Many states classify waste lubricants as “hazardous”, which means disposal only by a licensed firm. Follow applicable Federal, state, and local regulations.

WASTE DISPOSAL METHOD:

Standard landfill methods consistent with applicable Federal, State, and local law

Section 14: Transportation Information

DOT (CFR49): NOT REGULATED.

IATA (air): NOT REGULATED.

IMDG (ocean): NOT REGULATED.

HAZARD CLASSIFICATION: NON-HAZARDOUS.

PACKING GROUP: NOT REGULATED.

UN/NA CODE: NOT REGULATED.

Section 15: Regulatory Information

United States – Labor
U.S. – OSHA – Process Safety Management – Highly Hazardous Chemicals

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed

Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – OSHA – Specifically Regulated Chemicals

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – Environment

U.S. – CAA (Clean Air Act) – 1990 Hazardous Air Pollutants

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Hazardous Substances and their Reportable Quantities

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Radionuclides and their Reportable Quantities

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Section 302 Extremely Hazardous Substances EPCAR RQ's

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Section 302 Extremely Hazardous Substances TPQs

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Section 313 Emission Reporting

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

U.S. – CERCLA/SARA – Section 313 – PBT Chemical Listing

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – California

U.S. – California – Proposition 65 – Carcinogens List

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed

Diamond	7782-40-3	Not Listed
---------	-----------	------------

United States – California
U.S. – California – Proposition 65 – Developmental Toxicity

CHEMICAL NAME	CAS #	REG*
Ethylene Glycol **	107-21-1	Developmental toxicity, 6/19/2015 (ingested)
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – California
U.S. – California – Proposition 65 – Maximum Allowable Dose Levels (MADL)

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – California
U.S. – California – Proposition 65 – No Significant Risk Levels (NSRL)

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – California
U.S. – California – Proposition 65 – Reproductive Toxicity - Female

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed

Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – California
U.S. – California – Proposition 65 – Reproductive Toxicity - Male

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – Pennsylvania
U.S. – Pennsylvania – RTK (Right to Know) – Environmental Hazard List

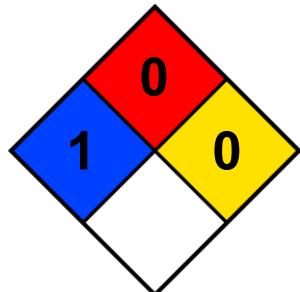
CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

United States – Pennsylvania
U.S. – Pennsylvania – RTK (Right to Know) – Special Hazardous Substances

CHEMICAL NAME	CAS #	REG*
Polyethylene Glycol	111-46-6	Not Listed
Water	7732-18-5	Not Listed
Diamond	7782-40-3	Not Listed

Section 16: Other Information

16.1 NFPA 704



Top, Flammability: 0 – Minimal Hazard

Left, Health Hazard: 1 – Slight Hazard

Right, Reactivity: 0 – Minimal Hazard

Bottom, Special Notice: N/A

Disclaimer:

PACE Technologies, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. PACE TECHNOLOGIES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, PACE TECHNOLOGIES, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

DATE REVISED: 7/16/2025 DZ