



Predictive Oncology[®]

Material Safety Data Sheet Predictive Oncology[™] ESP[™] Buffer #2

Section 1 - Chemical Product and Company Identification

MSDS Name: POAI[™] ESP Buffer #2

Catalog Numbers: ESP-9001.01

Synonyms:

Company Identification:

Predictive Oncology, Inc.
200 Riverhills Business Park, Suite 250
Birmingham, AL 35242

For information, call: 205-922-5403

Emergency Number:

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
	POAI [™] ESP Buffer #2	>99	
7732-18-5	Water	<0.5	231-791-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. SAF-T-DATA(tm)

Ratings (Provided here for your convenience)

Health Rating: 1 – Slight

Flammability Rating: 1 – Slight

Reactivity Rating: 1 – Slight

Contact Rating: 1 – Slight

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and chest pain.

Ingestion: Large doses may produce abdominal pain, nausea, and vomiting.

Skin Contact: May cause irritation with redness and pain.

Eye Contact: Contact may cause irritation, redness, and pain.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: No information found.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get

medical attention if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

Section 5 - Fire Fighting Measures

Fire: Autoignition temperature: 611C (1132F) As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. Listed fire data is for the Anhydrous Material.

Explosion: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Section 6 - Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container. Small amounts of residue may be flushed to sewer with plenty of water.

Section 7 - Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Section 8 - Exposure Controls, Personal Protection

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9 - Physical and Chemical Properties

Appearance: Clear liquid.

Odor: None.

Solubility:

Density:

pH: 8.5

% Volatiles by volume @ 21C (70F): 0

Boiling Point:

Melting Point: Loses water @ 120C (248F); decomposes @ 324C (615.2F)

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

Section 10 - Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Emits fumes of acetic acid upon heating and on contact with strong acids.

Hazardous Polymerization: Will not occur.

Incompatibilities: Nitric acid, fluoride, potassium nitrate, strong oxidizers and diketene.

Conditions to Avoid: Incompatibles.

Section 11 - Toxicological Information

Hydrate: Investigated as a mutagen. Anhydrous: Oral rat LD50: 3530 mg/kg; inhalation rat

LC50: > 30 gm/m³; skin rabbit LD50: > 10 mg/kg; Irritation Data, standard Draize: Skin rabbit 500 mg/24H, mild; standard Draize, Eye rabbit 10 mg, mild. Investigated as a mutagen.

No known carcinogenic effect.

Section 12 - Ecological Information

Environmental Fate: No information found.

Environmental Toxicity:

Freshwater Fish Species Data: 24 Hr LC50

Lepomis macrochirus: 5000 mg/L

Microtox Data: 18 Hr EC50 Pseudomonas putida: 7200 mg/L

Water Flea Data: 48 Hr EC50 water flea: 5800 mg/L

Section 13 - Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14 - Transport Information

Not regulated.

Section 15 - Regulatory Information

Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No

Reactivity: No (Pure / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Section 16 - Additional Information

NFPA Ratings: Health: **1** Flammability: **1** Reactivity: **0**

Label Hazard Warning: CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Use with adequate ventilation. Wash thoroughly after handling. Keep container closed.

Label First Aid: If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Product Use: Laboratory Reagent.

Revision Information: MSDS Section(s) changed since last revision of document include: 3, 12.

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