SAFETY DATA SHEET

ProMTag

Version 1.2 Revised: March 7, 2024

SECTION 1. IDENTIFICATION

Product name	ProMTag
Manufacturer or supplier's details	
Company	Impact Proteomics, LLC
Telephone	(412) 206-9735
Responsible Department	Impact Proteomics, LLC 1406 Browning Rd. Pittsburgh PA USA Tel: (412) 206-9735
Email address	info@impactproteomics.com
Emergency telephone	1-800-255-3924 ChemTel Chemical Emergency Response Hotline
Recommended use of the chemical	**and restriction on use**
Recommended use	Laboratory chemicals

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Flammable liquids	Category 2
Acute toxicity, Oral	Category 4
Acute toxicity, Inhalation	Category 4
Acute toxicity, dermal	Category 4
Eye irritation	Category 2A

GHS Label elements, including precautionary statements

Pictogram

Signal word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapor
H302 + H312 + H332	Harmful if swallowed, in contact with skin, or if inhaled
H319	Causes serious eye irritation

Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P271	Use in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P303 + P361 + P353	IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/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.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish.
P403+P235	Store in a well-ventilated area. Keep cool.
P501	Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture	Mixture
Substance Name	ProMTag Capture Resin

Component	Classification	Concentration
Acetonitrile CAS-No. 75-05-8	Flame. Liq. 2; Acute Tox. 4; Eye Irrit. 2A; H225, H302 + H312 + H332 + H319	90%

SECTION 4. FIRST AID MEASURES

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial
In case of skin contact	Wash off immediately with soap and water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
In case of eye contact	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person
Most important symptoms and effects, both acute and delayed	May cause mild irritation to areas of contact.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Flammable liquid. Use dry sand, dry chemical, or alcohol-resistant foam to extinguish.
Specific hazards during fire fighting	Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section). Vapors can travel to a source of ignition and flash back. Containers may explode in a fire. Cool containers from a distance using water spray. Forms explosive mixtures with air at ambient temperatures.
Hazardous combustion products	No hazardous combustion products are known
Special protective equipment for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.
Environmental precautions	Do not let product enter drains. Risk of explosion.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Filled under nitrogen. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
Conditions for safe storage, including any incompatibilities	Store in tightly closed, original containers in a cool, dry, well ventilated area. Store between 55-100°F for product stability. Do not store with strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Acetonitrile	75-05-8	TWA	20 ppm	USA. ACGIH Threshold Limit Values (TLV)
		TWA	20 ppm 34 mg/m3	USA. NIOSH Recommended Exposure Limits
		TWA	40 ppm 70 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		PEL	40 ppm 70 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		STEL	60 ppm 105 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Derived No Effect Level (DNEL)

Application area	Routes of exposure	Health effect	Value
Workers	Inhalation	Acute local effects, Acute systemic effects	68 mg/m3
Workers	Skin contact	Long-term systemic effects	32.2 mg/kg BW/d
Workers	Inhalation	Long-term local effects, Long-term systemic effects	68 mg/m3
Consumers	Inhalation	Acute local effects	220 mg/m3
Consumers	Inhalation	Acute systemic effects	22 mg/m3
Consumers	Inhalation	Long-term systemic effects	4.8 mg/m3

Predicted No Effect Concentration (PNEC)

Compartment	Value
Water	10 mg/l
Soil	2.41 mg/kg
Sea water	1 mg/l
Fresh water	10 mg/l
Fresh water sediment	7.53 mg/kg
Onsite sewage treatment plant	32 mg/l

Exposure Controls

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Personal protective equipment
Wear protective gloves and eye protection

Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.
Skin and body protection	Choose body protection according to the amount and concentration of the dangerous substance at the workplace. Footwear protecting against chemicals.
Hygiene measures	Keep away from food and drink. When using do not eat, drink, or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear/colorless
Physical state	Liquid
Odor	Ether-like
Odor Threshold	39.8 ppm
pH	Not available
Melting point/range	Not available
Boiling point/range	81 °C to 82 °C
Flash point	2°C: Closed cup
Evaporation rate	5.8
Flammability (solid gas)	Flammable liquid
Explosion limits	4.4-16%
Vapor pressure	98.64 hPa at 20°C
Vapor density	1.42

Density	0.786 g/cm3 at 25°C
Partition coefficient	log Pow: -0.54 at 25 °C (77 °F) - Bioaccumulation is not expected.
Solubility in water	Completely soluble in water

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Vapors may form explosive mixture with air.
Chemical stability	This product is chemically stable under standard ambient conditions.
Possibility of hazardous reactions	Violent reactions possible with: strong bases, strong reducing agents. Risk of explosion with: nitrates, perchlorates, perchloric acid, conc. Sulfuric acid, heat. Risk of ignition or formation of inflammable gases or vapors with: oxidizing agents, nitric acid, nitrogen dioxide, catalyst. Generates dangerous gases or fumes in contact with: acids.
Conditions to avoid	Keep away from heat, flame, and sparks.
Incompatible materials	No data available.
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity – oral exposure	LD50 Oral – Mouse- male and female- 617 mg/kg
Acute toxicity – dermal exposure	1,500 mg/kg
Acute toxicity – Inhalation	LC50 Inhalation – rat – 10 h – 20000 ppm
Irritation	No data available
Corrosivity	No data available
Sensitization	No data available
Repeated dose toxicity	No data available

Carcinogenicity	IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: A3: Confirmed animal carcinogen with unknown relevance to humans (ethanol) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA
Mutagenicity	No data available
Specific Target Organ Toxicity from single exposure	No data available
Specific Target Organ Toxicity from Repeated Exposure	No data available
Aspiration hazard	No data available
Additional toxicology information	No data available

SECTION 12. Ecological Information

Toxicity	Aquatic Vertebrate LC50 (96 hours): 13,000 mg/L Oncorhynchus mykiss (Rainbow Trout) Flow-through test LC50 - Pimephales promelas (fathead minnow) - 1,640 mg/l - 96 h static test NOEC - Phaeodactylum tricornutum - 400 mg/l - 72 h (ISO 10253) static test ErC50 - Phaeodactylum tricornutum - 9,696 mg/l - 72 h (ISO 10253)
Persistence and degradability	Result: 70 % - Readily biodegradable.
Bioaccumulative potential	Will not accumulate
Mobility in soil	Not expected to adsorb on soil
Results of PBT and vPVB assessment	No information available
Other adverse effects	Avoid release to the environment. Stability in water DT50 - > 9,999 d pH 7 at 25 °C Remarks: (calculated)Hydrolyzes slowly.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues/unused product	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14. TRANSPORT INFORMATION

Transportation by land – Department of Transportation (DOT, United States of America)

UN number	1648
UN proper shipping name	Acetonitrile
Transport hazard class	3
Packaging group	II
Reportable Quantity (RQ)	5000 lbs

Transportation by air – International Air Transport Association (IATA)

UN number	1648
UN proper shipping name	Acetonitrile
Transport hazard class	3
Packaging group	II

SECTION 15. REGULATORY INFORMATION

Occupational Safety and Health Administration Hazards

Not listed

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 313 Toxic Release Inventory (TRI)

Listed: Ethyl Alcohol

California Proposition 65

Ethyl Alcohol (in alcoholic beverages)

SECTION 16. OTHER INFORMATION

Document Revision

Last Revision Date: 3/7/24

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardization; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organization for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and Impact Proteomics, LLC. assumes no legal responsibility or liability whatsoever resulting from its use.