SAFETY DATA SHEET

mP-trypsin

Version 1.1 Revised: October 31, 2019

SECTION 1. IDENTIFICATION

Product name	mP-trypsin
Manufacturer or supplier's details	
Company	Impact Proteomics, LLC
Telephone	(512) 815-2067
Responsible Department	Impact Proteomics, LLC 1406 Browning Rd. Pittsburgh PA USA Tel: (512) 815-2067
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 according to regulation (EC) No. 1272/2008 [CLP]

GHS Label elements, including precautionary statements

Pictogram

Signal word	Danger
Hazard statement(s)	
H302	Harmful if swallowed
H402	Harmful to aquatic life

Precautionary statement(s)	
P264	Wash skin thoroughly after handling
P270	Do not eat, drink, or smoke when using this product
P273	Avoid release into the environment
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	mP-trypsin

Component	Classification	Concentration
Ammonium Bicarbonate	1066-33-7	0.5 M

SECTION 4. FIRST AID MEASURES

General advice	Show this material safety data sheet to the doctor in attendance
If inhaled	Move to fresh air. If symptoms persist, call a physician
In case of skin contact	Wash off immediately with soap an plenty of 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	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Notes to physician	

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Specific hazards during fire fighting	No data available
Hazardous combustion products	No hazardous combustion products are known
Specific extinguishing methods	In the event of fire and/or explosion do not breath fumes
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus for firefighting if necessary

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.
Methods and materials for containment and cleaning up	Keep in suitable, close containers for disposal
Environmental precautions	Do not let product enter drains

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling	Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.
Conditions for safe storage, including any incompatibilities	Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with work place control parameters

Contains no substances with occupational exposure limit values

Exposure Controls

Engineering controls	No specific controls are needed. Normal room ventilation is adequate
Respiratory Protection	No specific controls are needed. Normal room ventilation is adequate
Skin Protection	Wear protective gloves and eye protection
Eye Protection	Wear protective gloves and eye protection

Personal protective equipment
Wear protective gloves and eye protection

Eye protection	Safety glasses
Skin and body protection	Choose body protection according to the amount and concentration of the dangerous substance at the work place. 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	Odorless
Odor Threshold	Does not apply
pH	8
Melting point/range	No data available
Boiling point/range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid gas)	Not applicable as the mixture is a liquid
Explosion limits	No data available
Solubility in water	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions of use and storage
Chemical stability	When stored at room temperature the product is stable
Possibility of hazardous reactions	No known hazardous reactions
Conditions to avoid	No data available
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity – oral exposure	No data available
Acute toxicity – dermal exposure	No data available
Acute toxicity – Inhalation	No data available
Irritation	No data available
Corrositivity	No data available
Sensitisation	No data available
Repeated dose toxicity	No data available
Carcinogenicity	IARC: No component 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: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. 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 component of this product pres
Mutagenicity	No data available
Toxicity for reproduction	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	No data available
Persistence and degradability	Data not available
Bioaccumulative potential	Data not available
Mobility in soil	Data no available
Results of PBT and vPVB assessment	No information available
Other adverse effects	None known

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues/unused product	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

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

UN number	UN3077
UN proper shipping name	Environmentally hazardous substances, solid, n.o.s. (ammonium hydrogencarbonate)
Transport hazard class	9
Packaging group	III
Reportable Quantity (RQ):	5000 lbs

Transportation by air – International Air Transport Association (IATA)

Not regulated by IATA

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)
Ammonium bicarbonate (CAS # 1066-33-7) SARA Threshold values %: 1.0

Massachusetts Right-to-Know substance list
Ammonium bicarbonate (CAS # 1066-33-7): Present

Pennsylvania Right-to-Know Hazardous Substances
Ammonium bicarbonate (CAS # 1066-33-7): Environmental hazard
Ammonium bicarbonate (CAS # 1066-33-7): Present

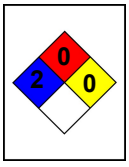
New Jersey Worker and Community Right-to-Know Components
Ammonium bicarbonate (CAS # 1066-33-7): present

California Proposition 65
Not listed.

European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)
Not listed.

National Fire Protection Association (NFPA) Rating

Health:	**2**
Flammability:	**0**
Reactivity:	**0**



SECTION 16. OTHER INFORMATION

Document Revision
Last Revision Date: 10/31/2019

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 Standardisation; 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 Organisation 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, Authorisation 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.