SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

- **Product Name**: EzSubcellExtract
- **Product Code**: WSE-7421
- **SDS No.**: A0032_1
- **General Use**: For research use only

- **Manufacturer**:
  - **Company Name**: ATTO Corporation
  - **Address**: 2-2, Motoasakusa 3-chome, Taito-ku, Tokyo 111-0041, Japan
  - **Department in Charge**: Headquarters, Customer Department
  - **Telephone No.**: +81-3-5827-4861
  - **Fax No.**: +81-3-5827-6647
  - **Emergency Telephone**: +81-3-5827-4863

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2. HAZARDS IDENTIFICATION

GHS Classification:

- **Specific target organ toxicity (single exposure)**: Category 2 (Respiratory system)

GHS Label Elements:

- **Signal Word**: Warning
- **Pictogram**:

Hazard Statement:

- **H371**: May cause damage to organs (Respiratory system).

Precautionary Statements:

- **Prevention**:
  - **P260**: Do not breathe dust/fume/gas/mist/vapors/spray.
  - **P264**: Wash hands and face thoroughly after handling.
  - **P270**: Do not eat, drink or smoke when using this product.
- **Response**:
  - **P308+P316**: IF exposed or concerned: Call a POISON CENTER or doctor.

- **Storage**:
  - **P405**: Store locked up.
- **Disposal**:
  - **P501**: Dispose of contents/container to an approved waste disposal plant in accordance with local/regional/national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- **Distinction of Substance or Mixture**: Mixture

WSE-7421 EzSubcell Extract : Mixtures

Extraction buffer 1

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Sodium chloride	0.9%	ClNa	7647-14-5

Extraction buffer 2

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Sucrose	9.6%	C12H22O11	57-50-1

Extraction buffer 3

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Sucrose	9.6%	C12H22O11	57-50-1

Extraction buffer 4

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Sodium chloride	0.9%	ClNa	7647-14-5

Protease Inhibitor

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Dimethyl sulfoxide	70%	C2H6OS	67-68-5

DNase I

Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Glycerol	50%	C3H8O3	56-81-5

4. FIRST AID MEASURES

- **Inhalation**: Remove victim to fresh air and keep at rest. Call a physician if necessary.
- **Skin Contact**: Wash with plenty of soap and water. If skin irritation occurs, get medical advice.
- **Eye Contact**: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- **Ingestion**: Rinse mouth. Do not induce vomiting without medical advice. Seek medical attention if you feel unwell.

5. FIRE FIGHTING MEASURES

- **Extinguishing Media**: Water spray, carbon dioxide (CO2), dry chemical powder, foam.
- **Specific Hazards**: Thermal decomposition can lead to release of irritating and toxic gases such as carbon monoxide (CO), carbon dioxide (CO2), sulfur oxides (SOx), and sulfur dioxide.
- **Protection of Firefighters**: Wear self-contained breathing apparatus (SCBA) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions**: Wear appropriate protective equipment (gloves, safety glasses, etc.). Ensure adequate ventilation.
- **Environmental Precautions**: Prevent entry into drains, sewers, or rivers.
- **Cleanup Methods**: Absorb spill with inert material (e.g., sand, silica gel, acid binder, universal binder) and place in a container for disposal.

7. HANDLING AND STORAGE

- **Handling**:
  - Use in a well-ventilated area.
  - Avoid contact with skin, eyes, and clothing.
  - Do not breathe vapors or mist.
- **Storage**:
  - Store in a cool, dark place. Keep container tightly closed and locked up.
  - Keep away from heat, sparks, and open flames.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Engineering Controls**: General ventilation is recommended. Provide eye-wash stations and safety showers near the handling area.
- **Personal Protective Equipment**:
  - **Respiratory**: Protective mask as needed.
  - **Hand**: Protective gloves (nitrile or rubber).
  - **Eye**: Safety glasses with side-shields or goggles.
  - **Skin and Body**: Long-sleeved protective clothing and boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Extraction Buffer 1

Appearance : liquid (clear)
Odor : Odorless
pH : 7 ~ 8
Boiling Point / Boiling Range : Not available
Melting Point / Melting Range : Not available
Decomposition Temperature : Not available
Flash Point : Not available
Auto Ignition Temperature : Not available
Flammability : Not flammable
Explosive Properties : Not available
Oxidizing Properties : Not available
Vapor Pressure : Not available
Relative Density : Not available
Solubility : Not available
Partition Coefficient(n-octanol /water) : Not available
Viscosity : Not available
Vapor Density : Not available
Evaporation Rate : Not available

Extraction Buffer 2

Appearance : liquid (clear)
Odor : Odorless
pH : 7 ~ 8
Boiling Point / Boiling Range : Not available
Melting Point / Melting Range : Not available
Decomposition Temperature : Not available

Flash Point : Not available
Auto Ignition Temperature
: Not available
Flammability : Not flammable
Explosive Properties : Not available
Oxidizing Properties : Not available
Vapor Pressure : Not available
Relative Density : Not available
Solubility : Not available
Partition Coefficient(n-octanol /water)
: Not available
Viscosity : Not available
Vapor Density : Not available
Evaporation Rate : Not available

Extraction Buffer 3

Appearance : liquid (clear)
Odor : Odorless
pH : 7 ~ 8
Boiling Point / Boiling Range
: Not available
Melting Point / Melting Range
: Not available
Decomposition Temperature
: Not available
Flash Point : Not available
Auto Ignition Temperature
: Not available
Flammability : Not flammable
Explosive Properties : Not available
Oxidizing Properties : Not available
Vapor Pressure : Not available
Relative Density : Not available
Solubility : Not available
Partition Coefficient(n-octanol /water)
: Not available

Viscosity : Not available
Vapor Density : Not available
Evaporation Rate : Not available

Extraction Buffer 4

Appearance : liquid (clear)
Odor : Odorless
pH : 7 ~ 8
Boiling Point / Boiling Range
: Not available
Melting Point / Melting Range
: Not available
Decomposition Temperature
: Not available
Flash Point : Not available
Auto Ignition Temperature
: Not available
Flammability : Not flammable
Explosive Properties : Not available
Oxidizing Properties : Not available
Vapor Pressure : Not available
Relative Density : Not available
Solubility : Not available
Partition Coefficient(n-octanol /water)
: Not available
Viscosity : Not available
Vapor Density : Not available
Evaporation Rate : Not available

Protease Inhibitor

Appearance : liquid (clear)
Odor : Odorless
pH : Not available
Boiling Point / Boiling Range
: Not available
Melting Point / Melting Range

: Not available

Decomposition Temperature

: Not available

Flash Point : Not available

Auto Ignition Temperature

: Not available

Flammability : Not available

Explosive Properties : Not available

Oxidizing Properties : Not available

Vapor Pressure : Not available

Relative Density : Not available

Solubility : Not available

Partition Coefficient(n-octanol /water)

: Not available

Viscosity : Not available

Vapor Density : Not available

Evaporation Rate : Not available

DNase I

Appearance : liquid (clear)

Odor : Odorless

pH : Not available

Boiling Point / Boiling Range

: Not available

Melting Point / Melting Range

: Not available

Decomposition Temperature

: Not available

Flash Point : Not available

Auto Ignition Temperature

: Not available

Flammability : Not available

Explosive Properties : Not available

Oxidizing Properties : Not available

Vapor Pressure : Not available

Relative Density : Not available

Solubility	: Not available
Partition Coefficient(n-octanol /water)	: Not available
Viscosity	: Not available
Vapor Density	: Not available
Evaporation Rate	: Not available

10. STABILITY AND REACTIVITY

- **Stability**: Stable under recommended storage conditions.
- **Conditions to Avoid**: Heat, flames, sparks, and direct sunlight.
- **Incompatible Materials**: Strong oxidizing agents.
- **Hazardous Decomposition Products**: Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides (SOx), Sulfur dioxide gas.

11. TOXICOLOGICAL INFORMATION

(Data for Dimethyl sulfoxide)

- **Acute Oral**: LD50 (rat) = 14,500 mg/kg.
- **Skin Corrosion/Irritation**: No data available.
- **Serious Eye Damage/Irritation**: No data available.
- **Germ Cell Mutagenicity**: No data available.
- **STOT Single Exposure**: May cause damage to the respiratory system (Category 2).

12. ECOLOGICAL INFORMATION

- **Ecotoxicity**: No data available.
- **Persistence and Degradability**: No data available.
- **Bioaccumulative Potential**: No data available.

13. DISPOSAL CONSIDERATIONS

- **Residual Waste**: Dispose of in accordance with local and national regulations. Use a licensed waste disposal contractor.
- **Contaminated Packaging**: Clean container with water before disposal or recycle according to local regulations.

14. TRANSPORT INFORMATION

- **UN Classification**: Not applicable (Not restricted for transport).
- **UN Number**: Not applicable.
- **Marine Pollutant**: Not applicable.
- **Precautions**: Ensure that there is no leakage. Prevent collapse of cargo piles.

15. REGULATORY INFORMATION (JAPAN)

- **Industrial Safety and Health Act (ISHA)**: Dangerous and Harmful Substances requiring SDS Notification (Article 57-2).
- **Pollutant Release and Transfer Register (PRTR) Law**: Not applicable.
- **Fire Service Act**:Hazardous Material Class 4, Group 3 Petroleum (Water-soluble), Hazard Class 3 (Dimethyl sulfoxide, glycerol)
- **Poisonous and Deleterious Substances Control Act**: Not applicable.

16. OTHER INFORMATION

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