

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

- **Product Name:** EzBactYeastCrusher
 - **Product Code:** WSE-7423
 - **SDS No.:** A0053_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
-

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-7423 EzBactYeast Crusher			
EzBactYeast Lysis buffer			
Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Glycerol	10%	C3H8O3	56-81-5
Others (water)	90%		
Yeast PreLysis buffer			
Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Phosphoric acid, sodium salt, hydrate (1:2:12)	8.95%	HNa2O4P·12H2O	10039-32-4
Others (water)	91.05%		
Protease Inhibitor			
Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Dimethyl sulfoxide	< 80%	C2H6OS	67-68-5
Others (water)	20%<		
DNase I			
Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Glycerol	< 50%	C3H8O3	56-81-5
Others (water)	50%<		

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 (SO_x), 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

BactYeast Lysis buffer

Appearance : liquid (clear)

Odor : Odorless

pH : 7-9

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

Yeast PreLysis buffer

Appearance : liquid (clear)

Odor : Odorless

pH : 12-13

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 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

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 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

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 (SO_x), 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

This information is furnished without warranty, express or implied, expect that it is accurate to the best knowledge of ATTO Corporation. It relates only to the specific product designated herein, and does not relate to use in combination with any other material or in any process. ATTO Corporation assumes no legal responsibility for use of or reliance upon this information.