

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : EzBactYeastCrusher

Product Code : WSE-7423

MSDS No. : A0053-1

General Use : Research use only

MANUFACTURER

Company Name : ATTO Corporation

Address : 2-2, Motoasakusa 3 cho-me, Taito-ku, Tokyo 111-0041, Japan

Telephone No. : +81-3-5827-4861

EMERGENCY TELEPHONE NUMBER

: +81-3-5827-4863

2. HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Serious eye damage/eye irritation Category 2B

Pictograms

Signal word Warning

Hazard statements

H320 - Causes eye irritation

Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention

Precautionary statements-(Storage)

- No

Precautionary statements-(Disposal)

- No

Others

Other hazards Not available

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Single 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.
Glycerol	<50%	C3H8O3	56-81-5
Others (water)	50%<		
DNase I			
Chemical Name	wt(%)	Chemical Formula	CAS Registry No.
Dimethyl sulfoxide	<80%	C2H6OS	67-68-5
Others (water)	20%<		

4. FIRST AID MEASURES**Inhalation**

Remove to fresh air If symptoms persist, call a physician

Skin contact

Wash off immediately with soap and plenty of water If symptoms persist, call a physician

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediate medical attention is required

Ingestion

Rinse mouth Never give anything by mouth to an unconscious person Call a physician or poison control center immediately Do not induce vomiting without medical advice

Protection of first-aiders

Use personal protective equipment as required

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures, such as water spray, alcohol-resistant foam, dry chemical or carbon dioxide, that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

No information available

Special extinguishing method

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters

Use personal protective equipment as required Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope.

While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated See Section 12 for additional ecological information

Methods and materials for contaminant and methods and materials for cleaning up

Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental

regulations

7. HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with eyes and skin Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required

Storage

Safe storage conditions

Storage conditions Store away from sunlight in well-ventilated place at room temperature (under 25 °C). Keep container tightly closed.

Safe packaging material Polyethylene, Polypropylene

Incompatible substances Strong oxidizing compound

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures

: For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipment to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Exposure limit

:This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Ventilation

: Local Exhaust ; Necessary, Mechanical (General); Recommended

Personal protection;

Respiratory protection

: Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses (Chemical goggles)

Skin protection : Protective clothing

Control parameter

OSHA Final Limits : None established

ACGIH TLV(s) : None established

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 availableMelting Point / Melting Range
: Not availableDecomposition 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 availableMelting 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
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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

Conditions to avoid

: Sunlight, heat, moisture

Stability

: Stable under recommended storage conditions.

Incompatible materials

: No information available

Hazardous reactions / Decomposition products

: Carbon monoxide, Nitrogen oxide, Sulfur oxide

11. TOXICOLOGICAL INFORMATION

Acute toxicity : No data available

Skin irritation/corrosion : Rabbit; 500 mg/24H; mild

Serious eye damage/ irritation : Rabbit; 500mg/24H; mild

Respiratory or skin sensitization : No data available

Reproductive cell mutagenicity : No data available

Carcinogenicity : No data available

Reproductive toxicity : No data available

STOT-single exposure : No data available

STOT-repeated exposure : No data available

Aspiration hazard : No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Other data :No data available

Persistence and degradability :No information available

Bioaccumulative potential :No information available

Mobility in soil :No information available

Hazard to the ozone layer :No information available

13. DISPOSAL CONSIDERATIONS**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

IATA : Not Restricted.

MARINE POLLUTANT : NO

DOT (Department of Transportation):Not a Hazardous Material for DOT shipping.

15. REGULATORY INFORMATION

US REGULATIONS ;

EPA : CERCLA RQ=Not listed

EPCRA TPQ=Not listed

OSHA; TQ = Not listed

16. OTHER INFORMATIONS

This SDS is created based on the latest data and documents we can gain at this point, and may be revised with new information. Also, precautions in SDS are intended for normal handling. If a person tries to use the product for the special purpose or by method, he/she must take safety measures appropriate to purpose and usage. Although we, ATTO Corporation, create the SDS with minute attention, the contents are not guaranteed.