

## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : EzRun  
Product Code : AE-1410  
SDS No. : A0002-1  
General Use : Research use only  
MANUFACTURER  
Company Name : ATTO Corporation  
Address : 2-2, Motoasakusa 3 cho-me, Taito-ku, Tokyo 111-0041, Japan  
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### 2. HAZARDS IDENTIFICATION

#### GHS classification

#### Classification of the substance or mixture

Acute toxicity - Oral Category 4  
Acute toxicity - Dermal Category 3  
Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2A  
Specific target organ toxicity (single exposure) Category 3  
Category 3 Respiratory tract irritation  
Specific target organ toxicity (repeated exposure) Category 2  
Category 2 kidneys  
aquatic environment (acute hazard) Category 1

#### Pictograms



Signal word

Danger

**Hazard statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H373 - May cause damage to the following organs through prolonged or repeated exposure: kidneys

**Precautionary statements-(Prevention)**

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces.
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment

**Precautionary statements-(Response)**

- Get medical advice/attention if you feel unwell
- 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.
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell.
- Remove/Take off immediately all contaminated clothing
- Wash contaminated clothing before reuse.
- If skin irritation occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth.
- In case of fire: Use CO2, dry chemical, or foam for extinction
- Collect spillage

**Precautionary statements-(Storage)**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others****Other hazards** Not available**3. COMPOSITION/ INFORMATION ON INGREDIENTS****mixture**

Chemical Name	wt (%)	Chemical Formula	CAS Registry No.
Sodium Dodecyl Sulfate	5.4%	C <sub>12</sub> H <sub>25</sub> NaO <sub>4</sub> S	151-21-3
2-amino-2-(hydroxymethyl)-1,3-propanediol	16.4%	C <sub>4</sub> H <sub>11</sub> NO <sub>3</sub>	77-86-1
Glycine	78.2%	C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub>	56-40-6

**4. FIRST AID MEASURES****Inhalation**

Remove to fresh air. Call a physician.

**Skin contact**

Wash off immediately with soap and plenty of water. 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.

**Protection of first-aiders**

Use personal protective equipment as required.

**5. FIRE FIGHTING MEASURES****Suitable extinguishing media**Water spray (fog), carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder, Sand**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 strong oxidizing agents. 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**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Storage****Safe storage conditions****Storage conditions**

Store away from sunlight in well-ventilated place at room temperature (preferably cool).

Keep container tightly closed.

**Safe packaging material** Polyethylene, Polypropylene

**Incompatible substances** Strong oxidizing agents

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

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

**Personal protective equipment**

**Respiratory protection** Dust mask

**Hand protection** Protection gloves

**Eye protection** protective eyeglasses or chemical safety goggles

**Skin and body protection** Wear suitable protective clothing, protective boots

**General hygiene considerations**

Do not eat, drink or smoke when using this product Wash contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Form**

**Color** white

**Appearance** crystals - crystalline powder

**Odor** characteristic odor

**pH** No data available

**Melting point/freezing point** No data available

**Boiling point, initial boiling point and boiling range** No data available

**Flash point** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits :** No data available

**Vapour pressure** No data available

**Vapour density** No data available

**Specific Gravity / Relative density** No data available

**Solubilities** No data available

**n-Octanol/water partition coefficient:(log Pow)** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity (coefficient of viscosity)** No data available

**Dynamic viscosity** No data available

## **10. STABILITY AND REACTIVITY**

### **Stability**

**Stability** Stable under recommended storage conditions.

**Reactivity** No data available

**Hazardous reactions** None under normal processing

**Conditions to avoid** Extremes of temperature and direct sunlight

**Incompatible materials** Strong oxidizing agents

**Hazardous decomposition products** Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

## **11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

**Chemical Name** Sodium Dodecyl Sulfate

**Oral LD50** 1288 mg/kg ( Rat )

**Dermal LD50** 580 mg/kg ( Rabbit )

**Inhalation LC50** > 3900 mg/m<sup>3</sup> ( Rat ) 1 h

**Chemical Name** Sodium Dodecyl Sulfate

**Acute toxicity -oral- source information**

LD50(oral,rat):1,200 mg/kg (SIDS(1991)), 2,730 mg/kg (EHC 169(1996)).

**Acute toxicity -dermal- source information**

LD50(skn,rabbit): approx.600mg/kg (SIDS(1991))、LD50(skn,rabbit): 580 mg/kg (EHC 169(1996))

**Acute toxicity -inhalation gassource information**

Based on the NITE GHS classification results.

**Skin irritation/corrosion**

**Chemical Name** Sodium Dodecyl Sulfate

**Skin corrosion irritation source information**

Rabbit : highly irritating (ECETOC TR66(1995)、IUCLID(2000)).

**Serious eye damage/ irritation**

**Chemical Name** Sodium Dodecyl Sulfate

**Serious eye damage source information**

Based on the NITE GHS classification results.

**Respiratory or skin sensitization** No data available

**Reproductive cell mutagenicity** No data available

**Carcinogenicity**

**Chemical Name** Sodium Dodecyl Sulfate

**Carcinogenicity source information**

Based on the NITE GHS classification results.

**Reproductive toxicity** No data available

**STOT-single exposure**

**Chemical Name** Sodium Dodecyl Sulfate

**STOT -single exporsure- source information**

Based on the NITE GHS classification results.

**STOT-repeated exposure**

**Chemical Name** Sodium Dodecyl Sulfate

**STOT -repeated exposure- source information**

Based on the NITE GHS classification results.

**Aspiration hazard** No data available

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Chemical Name** Sodium Dodecyl Sulfate

**Algae/aquatic plants** *EC50:Pseudokirchneriella subcapitata* 3.59 - 15.6 mg/L 96h static

**Fish** *LC50:Oncorhynchus mykiss* 4.62 mg/L 96 h

**Crustacea** *LC50: American lobster 0.72mg/L 96h*

**Other data**

Chemical Name Sodium Dodecyl Sulfate

Aquatic toxicity -Acute- source information Based on the NITE GHS classification results.

Aquatic toxicity -Chronic- source information Based on the NITE GHS classification results.

**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

**Japanese regulations**

**Fire Service Act** Not applicable

**Poisonous and Deleterious Substances Control Law**

Not applicable

**Industrial Safety and Health Act** Not applicable



**Regulations for the carriage and storage of dangerous goods in ship**

Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)

**Civil Aeronautics Law** Toxic and Infectious Substances

(Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)

**Pollutant Release and Transfer Register Law** Class 1

Class 1 - No. 275

**Export Trade Control Order** Not applicable

**16. OTHER INFORMATIONS**

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