

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
Telephone No. : +81-3-5827-4861
EMERGENCY TELEPHONE NUMBER
: +81-3-5827-4863

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 ₁₂ H ₂₅ NaO ₄ S	151-21-3
2-amino-2-(hydroxymethyl)-1,3-propanediol	16.4%	C ₄ H ₁₁ NO ₃	77-86-1
Glycine	78.2%	C ₂ H ₅ NO ₂	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 (CO₂), 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 (CO₂)

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/m³ (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

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.