



Material Safety Data Sheet
TGSTRU EZYM

Documentation Code: FR-C-RD-OC-20
Revision No.: 01
Issue Date: 2021.11.30
Validity Date: 2027.11.30

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Enzymatic cleaner

Trade name: TGSTRU EZYM

1.2. Product use: Concentrate, enzymatic cleaner of endoscopes & surgical instruments

1.3 Details of the supplier of the safety data sheet

Producer: TGS Company

Telephone number: 021-52868

Email: hello@tgs.co.com

Section 2: Hazards identification

2.1. Classification

Product as sold:

Skin corrosion/irritation category 3, Serious eye damage/eye irritation category 2, Respiratory sensitization category 1

2.2. Label Elements



Irritant/Harmful



Health hazard

Precautionary Statements – Prevention:

Keep only in original packaging. Wear protective gloves, protective clothing and eye or face protection.

Do not breath dust/fume/gas/mist/vapors/spray.

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

Precautionary Statements – Response:

Immediately call a POISON CENTER or doctor/physician.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water.

Section 3: Composition/information on ingredients

Name	CAS Number	Classification
Multi-Enzyme	Protease: 9014-01-1 Alpha-amylase: 9000-90-2 Lipase: 9001-62-1	Skin corrosion/irritation category 3, Serious eye damage/eye irritation category 2, Respiratory sensitization category 1



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Section 4. First Aid Measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact: Take off immediately all contaminated clothing and wash it before reuse.

Inhalation: Get medical attention or advice if you feel unwell.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

Section 5. Firefighting Measures

5.1. Extinguishing media

Dry chemical, carbon dioxide, water spray, or regular foam

5.2. Special hazards arising from the substance or mixture

No special hazards known.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up

Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

Section 7. Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Take off immediately all contaminated clothing. Avoid contact with skin. Do not breathe spray. Use only with adequate ventilation. See chapter 8, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a well-ventilated place. Store in a closed container. Keep only in original packaging. Keep at a temperature between 10 °C and 25 °C. Keep from freezing. Keep cool. Keep away from heat and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.



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Section 8. Exposure controls/personal protection

Personal protective equipment

Product as sold:

Eye / face protection: Safety goggles, Face-shield

Hand protection: Wear standard glove.

Skin protection: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unnaturalized.

Product at use dilution:

No special protective equipment required.

Section 9. Physical and chemical properties

Physical state: liquid

Color: Clear, pale green

Odor: Odorless

pH= 7.5-8.5

Section 10. Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

Keep away from strong oxidizing agents, strong acids, strong bases, organic solvents and heavy metals.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur under normal temperatures and pressures.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

Strong oxidizers, acids.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

Section 11. Toxicological information

11.1 Information on toxicological effects

Product as sold:

Eyes: Causes serious eye damage. Symptoms may include irreversible damage, blindness, pain, redness, stinging, swelling, and tearing.

Skin: Causes skin irritation and may cause an allergic skin reaction. Symptoms may include irritation, itching, pain, redness, stinging, or rash.

Chronic Exposure: Health injuries are not known or expected under normal use.

Product at use dilution:

Health injuries are not known or expected under normal use.

11.2 Information on other hazards

No other relevant information available.



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Section 12. Ecological information

12.1 Toxicity

Product as sold:

Environmental Effects: The product is anticipated to be safe for the environment at concentrations predicted in settings under normal-use conditions.

Product at use dilution:

Readily biodegradable.

12.2. Biodegradation

No data is available on the mixture.

12.3 Other adverse effects

No other adverse effects known.

Section 13. Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Section 14. Transport information

- 14.1. UN Number: Not required
- 14.2. Proper Shipping Name: ENZYME SOLUTION
- 14.3. Transport Hazard Class: Not required
- 14.4. Packing Group: Not required
- 14.5. Special Precautions:
 - "KEEP AWAY FROM HEAT" warning label required

Section 15. Regulatory information

This product is approved by the Iran Food and Drug Administration

Section 16. Other information

- 16.1. Revision Date: 09-09-2023