



Section 1 – Product & Company Identification

Product Name: Tyrode's Solution Acidified (pH 2.1-2.5)
Product Number: 99252

Company: Irvine Scientific
2511 Daimler Street
Santa Ana, California 92705-5588

Technical Phone Number: 800-437-5706
Fax Number: 949-261-6522
Emergency Phone Number: 800-437-5706
E-Mail Address: nucleus@irvinesci.com

Section 2 – Hazards Identification

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS].
HMIS Rating: Health = 0, Fire = 0, Reactivity = 0
NFPA Rating: Health =0, Flammability = 0, Reactivity = 0

Section 3 – Composition/Information on Ingredients

Product name	CAS Number	EC Number	Annex I Number
Tyrode's Solution Acidified (pH 2.1-2.5)	None	None	None

Section 4 – First Aid Measures

General information: When in doubt or if symptoms are observed, get medical advice.
In case of inhalation: Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact: Wash immediately with soap and water. In case of skin irritation, consult a physician.
In case of eye contact: Rinse immediately carefully and thoroughly with eye-bath or water.
In case of ingestion: Rinse mouth thoroughly with water.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media: Water, foam, extinguishing powder, carbon dioxide (CO₂)
Extinguishing media which must not be used for safety reasons: None
In case of fire may be liberated: Emits toxic fumes under fire conditions
Special protective equipment for fire-fighters: Wear a self-contained breathing apparatus

Section 6 – Accidental Release Measures

Personal precautions: Provide adequate ventilation

Environmental Precautions: None

Methods for cleaning up:

Suitable material for diluting or neutralizing: water

Suitable material for taking up: sand, absorbing material, earth

Section 7: Handling & Storage

Handling: Avoid inhalation. Avoid skin contact. Avoid eye contact.

Storage:

Storage temperature: 15-30° C

Protect against: Light

Conditions: Keep tightly closed

Section 8 – Exposure controls / Personal protection

Exposure limit values: Not available

Exposure Controls:

Product related measures to prevent exposure: Observe the expiry date

Personal protection equipment:

Respiratory protection: No personal respiratory protective equipment normally required.

Where protection is desired, use multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: disposable gloves

Eye protection: Eye glasses

Protective clothing: Lab coat

General health and safety measures: Avoid contact with skin, eye and clothing. Remove contaminated, saturated clothing. Wash contaminated clothing prior to re-use.

Section 9 – Physical and Chemical Properties

General:

Physical State: Liquid

Color: Clear, Colorless

Odor: Characteristic

Important health, safety and environmental information:

pH value: Neutral

Melting point / melting range: Not available

Solidifying point: Not available

Freezing point: Not available

Boiling point: Not available



Vapor pressure: Not available
Density: Not available
Bulk density: Not available
Solubility: Water
Viscosity: Not available
Flow time: Not available

Other information:

Solvent Content (%): 0%

Section 10 – Stability and Reactivity

Stability: Stable

Conditions to avoid: Temperatures below 0°C

Materials to avoid: Oxidizing agents, Strong; Reducing agent, strong

Hazardous decomposition products: Unknown

Section 11 – Toxicological Information

Toxicokinetics metabolism and distribution: Not determined

Toxicological effects: Not determined

Irritant and corrosive effects: May cause irritation to skin, eyes, or mucous membranes.

Section 12 – Ecological Information

Ecotoxicity: Not determined

Mobility: Not determined

Persistence and degradability: Not available

Biodegradation: Evidence exists of biodegradation processes

Bioaccumulative potential: Does not significantly accumulate in organisms.

Overall evaluation: On the basis of existing data about the elimination/degradation and bioaccumulation, potential longer term damage to the environment is unlikely.

BOD5 and COD: Not available

Section 13 – Disposal Considerations

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Section 14 – Transportation Information

Land transport (ADR/RID): Not a dangerous good in sense of this transport regulation.

Inland water ways transport (ADN): Not a dangerous good in sense of this transport regulation.

Sea transport (IMDG): Not a dangerous good in sense of this transport regulation.

Air transport (ICAO-TP / IATA-DGR): Not a dangerous good in sense of this transport regulation.

DOT Classification: Not a DOT controlled material (United States)

Section 15 – Regulatory Information

For this mixture a chemical safety assessment has not been carried out.

Germany: WGK: 1 - Self-Assessment

Listed European Food Additive: None of the ingredients are on the inventory, and may be exempt from listing.

TSCA Inventory List: None of the ingredients are on the inventory list.

CERCLA: Not Available

SARA Title III: Not Available

Foreign Inventory List: Not Available

Section 16 – Other Information

Irvine Scientific supplies Material Safety Data Sheets (MSDS) for products you have purchased. The regulations promulgated by OSHA for Hazard Communication, 29 CFR 1910.1200, and 1907/2006/EC and are used as the basis for the development of the MSDS.

All information is offered in good faith as accurate, but is furnished without guaranty. No claim is made that the information is all inclusive, and should only be used as a guide. Irvine Scientific shall not be held liable for any damage resulting from handling or from contact with the product. Federal and California Hazard Communication regulations stipulate that any food, food additive, color additive, drug, cosmetic or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g, flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 USC 301 et seq) or the Virus-Serum-Toxic Act of 1913 (21 USC 151 et seq,), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture do not require labeling.