

# SAFETY DATA SHEET

Issuing Date: 24-Apr-2019

Version 2

## Tyrodes Solution Acidified (pH 2.1-2.5)

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Tyrodes Solution Acidified (pH 2.1-2.5)

**Product code** 99252

**Product Use** Laboratory chemicals.

**Manufactured by**  
 FUJIFILM Irvine Scientific, Inc.  
 2511 Daimler Street  
 Santa Ana, CA 92705  
 U.S.A.

**SDSs are available at the following website(s):** <http://www.irvinesci.com>

**Company Phone Number** Technical: 800-437-5706  
 Fax: 949-261-6522

**Emergency Telephone** Transport-CHEMTREC Inside NA: 800-424-9300  
 Transport-CHEMTREC Outside NA: 703-527-3887  
 Transport-CANUTEC Inside Canada: 613-996-6666  
 Medical Emergency (24 hour): 877-935-7387

**E-mail** [tmrequest@irvinesci.com](mailto:tmrequest@irvinesci.com)

### 2. HAZARDS IDENTIFICATION

**Classification**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**GHS Label elements, including precautionary statements**

Not classified

**Precautionary Statements****Prevention**

Not applicable

**Response**

Not applicable

**Storage**

Not applicable

**Disposal**

Not applicable

**Hazards not otherwise classified (HNOC)**

Not classified

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**4. FIRST AID MEASURES****First aid measures for different exposure routes****General advice**

Immediate medical attention is not required.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact**

Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.

**Inhalation**

Move to fresh air. If symptoms persist, call a physician.

**Ingestion**

If swallowed, do not induce vomiting - seek medical advice.

**Most important symptoms/effects, acute and delayed**

None known.

**Indication of immediate medical attention and special treatment needed, if necessary**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.**Unsuitable Extinguishing Media**

None known.

**Specific hazards arising from the chemical**

None known.

### **Hazardous Combustion Products**

Carbon oxides. Sodium oxides. Hydrogen chloride.

### **Explosion Data**

**Sensitivity to Mechanical Impact** none

**Sensitivity to Static Discharge** none

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid contact with the skin and the eyes.

### **Environmental precautions**

Prevent product from entering drains.

### **Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

### **Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 15 and 30 °C (59 and 86 °F).

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

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

### **Exposure controls**

**Engineering Measures** Ventilation systems

### **Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection** Wear protective gloves/clothing.

**Respiratory protection** None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**General Hygiene Considerations** When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear	<b>Odor</b>	Characteristic
<b>Odor Threshold</b>	Not available	<b>Physical State @20°C</b>	Liquid
<b>pH</b>	2.1 - 2.5	<b>Molecular Weight</b>	Not available
<b>Specific Gravity</b>	Not available	<b>Autoignition temperature</b>	Not available
<b>Flash point</b>	Not available	<b>Boiling point / boiling range</b>	Not available
<b>Decomposition temperature</b>	Not available	<b>Freezing Point</b>	Not available
<b>Melting point / melting range</b>	Not available		
<b>Flammability Limit in Air</b>	Not available		
<b>Oxidizing Properties</b>	Not available	<b>Explosive Properties</b>	Not available
<b>Solubility</b>	Not available	<b>Partition coefficient</b>	Not available
<b>Evaporation rate</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor density</b>	Not available	<b>Density</b>	Not available
<b>VOC (lb/gal)</b>	Not available	<b>VOC (g/l)</b>	Not available
<b>Dynamic viscosity</b>	Not available		

## 10. STABILITY AND REACTIVITY

### Reactivity

Stable under recommended storage conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Freezing. Protect from light.

### Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

### Hazardous Decomposition Products

None known.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

### Product Information

**Acute toxicity****Inhalation**

Non-irritating during normal use.

**Eyes**

May cause slight irritation.

**Skin**

May cause slight irritation.

**Ingestion**

Ingestion may cause stomach discomfort.

**Component Information**

No information available

**Information on toxicological effects**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Irritation**

May cause slight irritation.

**Corrosivity**

No information available.

**Sensitization**

No information available.

**Mutagenic Effects**

No information available.

**Reproductive Toxicity**

No information available.

**Carcinogenicity**

None known.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Target Organ Effects**

None known.

**Aspiration hazard**

No information available.

**Numerical measures of toxicity - Product Information****ATEmix (oral)**

&gt;5000 mg/kg

**ATE: Acute toxicity estimate****12. ECOLOGICAL INFORMATION****Ecotoxicity**

The environmental impact of this product has not been fully investigated.

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**

No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Waste Disposal Methods

Dispose of in accordance with local regulations.

#### Contaminated packaging

Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated.
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

TSCA	No
DSL/NDSL	No
PICCS	Yes
EINECS/ELINCS	No
ENCS	No
IECSC	Yes
KECL	No
AICS	Yes

**\*Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

**\*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****TSCA Sections 4, 5 and 12(b)**

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Classification is shown in section 2 of this SDS

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations.

**International Regulations****Canada - NDSL**

This product does not contain any NDSL chemicals.

**Mexico - Grade**

No information available

**Mexico - Carcinogen Status and Exposure Limits**

No information available

**Other Regulations**

No information available

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 1	<b>Physical Hazard</b> 0	<b>Personal protection</b> B

**Prepared By** FUJIFILM Environment, Health and Safety, phone: 800-473-3854

**Revision Date** 24-Apr-2019

**Revision Note** No information available

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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