



# MATERIAL SAFETY DATA SHEET

(In accordance with ISO 11014-1 Standard)

Product Name: Tissue-Tek<sup>®</sup> Xpress<sup>®</sup> Processing Reagent #1, Formula 3

Revision Date: 2008-12-01

## 1. Identification of the Substance

**Product Name:** Tissue-Tek<sup>®</sup> Xpress<sup>®</sup> Processing Reagent #1, Formula 3 – (Product Code #7151)

**Synonym(s):** N/A

**General Use:** Tissue-Tek<sup>®</sup> Xpress<sup>®</sup> Rapid Tissue Processor

**Manufactured For:** Sakura Finetek USA, Inc.  
Torrance, CA 90501 USA  
Tel: 310-972-7800

**Emergency Telephone Number:**  
800-424-9300 (Chemtrec)

## 2. Composition/Data on Components

Component Name	CAS#	Concentration	NIOSH (TWA)	ACGIH (TLV)	ACGIH (STEL)	OSHA PEL (TWA)
Trade Secret 1, Chemical identity withheld	Trade Secret	Trade Secret	750 ppm	500 ppm	750 ppm	1000 ppm
Trade Secret 2, Chemical identity withheld	Trade Secret	Trade Secret	400 ppm	400 ppm	500 ppm	400 ppm
Trade Secret 3, Chemical identity withheld	Trade Secret	Trade Secret	n/a	n/a	n/a	n/a

## 3. Hazards Identification

### EMERGENCY OVERVIEW

#### Immediate Concerns:

#### DANGER:

This product is flammable. It is a volatile substance, and its vapors form a flammable mixture with air. Mixture of vapor or liquid of this product with air exposed to heat, static, electric spark, or open flame will explode.

#### Potential Health Effects:

Product causes irritation to the eyes, skin, nose, and throat. Inhalation may cause serious damage to the lining of the nose, throat, and lungs. It is harmful or fatal if inhaled. Excessive exposure may produce symptoms of central nervous system.

#### HMIS Rating

Health: 2  
Flammability: 3  
Reactivity: 0  
Protection: H

#### HMIS Rating Scale

Minimal: 0  
Slight: 1  
Moderate: 2  
High: 3  
Severe: 4

#### HMIS Rating Notes:

Protection = H (Splash Goggles, gloves, apron, Vapor Respirator)

## 4. First Aid Measures

**Inhalation:** Move to fresh air. If there is difficulty in breathing, give artificial respiration. Seek medical attention if irritation occurs and persists.

**Ingestion:** Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious, or is convulsing. Obtain medical attention or contact the poison center immediately.

**Skin:** Remove contaminated clothing and thoroughly wash affected area with soap and water. If irritation occurs and persists, contact a medical doctor.

**Eyes:** Immediately flood the eye with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs and persists.

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### **5. Fire Fighting Measures**

**VALUES ARE FOR THE PREDOMINANT INGREDIENT**

**Flash Point and Method:** 0 F (CC).

**Flammable Limits in Air % by Volume:** 2.5% LEL, 12.8% UEL

**Auto Ignition Temperature:** 465 C (869F)

**Extinguisher Media:** Use Dry Chemical, Foam, or Carbon Dioxide to extinguish the fire. Water may be ineffective, but water should be used to keep fire exposed container cool.

**Fire/Explosion Hazards:** WARNING: Above flash point, vapor-air mixtures are explosive within flammable limit noted above. Hot Organic Chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature a Auto Ignition Temperature. Ignition temperatures decrease with increasing vapor volume and Vapor/Air contact time and are influenced by pressure changes. Any proposed use of this product in elevated temperature processes should be thoroughly evaluated for safety methods.

**Fire Fighting Procedure:** Wear NIOSH approved self contained breathing mask. Vapors are explosive above flammable limits when exposed to heat, sparks or flame. Contact with strong oxidants may cause fires and explosion. Vapor from from this product may travel or be moved by air currents to distant ignition source. Consider evacuation downwind.

**Hazardous Decomposition Products:** Carbon Monoxide, Carbon Dioxide

### **6. Accidental Release Measures**

Eliminate all sources of ignition. Contain spill and ventilate the area. Permit only trained personnel wearing protective equipment to contain spill. Keep product out of streams and sewers. Absorb spills with absorbent. Put contaminated absorbent into a DOT approved container and dispose according to the methods outlined in the "Disposable Considerations" section.

### **7. Handling and Storage**

**Handling:** Avoid contact with eyes, skin and clothing. Avoid breathing product vapors and mists. Do not take internally. Wash thoroughly after handling this material. Use this material with adequate ventilation.

**Storage:** This material should be stored in well ventilated area and flammable cabinet. Keep away from heat, sparks, static discharge, and open flames. Keep containers closed when not in use or in transit.

### **8. Exposure Controls/Personal Protection**

**Engineering Control Measures:** Use a ventilation system to maintain atmospheric concentration below published exposure limits. Explosion-proof fans should be used in mechanical type ventilation system.

#### **Personnel Protective Equipment**

**Respiratory Protection:** If engineering controls do not maintain airborne concentration below recommended limits, use a NIOSH approved respirator for organic vapor.

**Hand Protection:** Chemical resistant gloves.

**Eye Protection:** Chemical goggles or safety glasses with side shields.

**Body Protection:** Coverall or Apron.

### **9. Physical and Chemical Properties**

**VALUES ARE FOR THE PREDOMINANT INGREDIENT**

**Appearance:** Clear, colorless liquid

**Odor:** sharp odor

**pH:** No data available.

**Boiling Point:** 56.5 C (133 F) @ 760 mm Hg

**Melting Point:** -95 C (-139 F).

**Flash Point:** -20C (-4 F)

**Auto Ignition Temperature:** 465 C (869 F)

**Specific Gravity:** 0.7915 @ 20 C

**Solubility in water:** Yes

**Reactivity in water:** No

**Vapor Pressure:** 400 mm Hg @ 39.5 C (104 F)

**Vapor Density (Air=1) :** 2

**Evaporation Rate (BuAc = 1):** 7.7

**% Volatiles by Volume:** 100 @ 21 C (70F)

### **10. Stability and Reactivity**

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**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Heat, sparks, flame, ignition sources and incompatibles.

**Materials to Avoid:** Concentrated nitric and sulfuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, bases, potassium t-butoxide, calcium carbide, magnesium, cyanuric, bromine, hydrogen peroxide.

**Hazardous Decomposition Products:** Carbon Monoxide, carbon dioxide..

**Hazardous Polymerization:** Will not occur.

### 11. Toxicological Information

**THE FOLLOWING TOXICITY DATA ARE REACHED FROM SOURCES SUCH AS THE MSDS OF RAW MATERIALS AND DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, 7TH EDITION, 1989.**

**Trade Secret #1**

**Oral Rat LD50:** 5800 mg/Kg

**Inhalation Rat LC50:** 50,100 mg/m<sup>3</sup>

**Irritation eye (rabbit):** 100 mg/24Hr. Moderate

**Irritation Skin (rabbit):** 500 mg/24Hr. Mild

**Oral TDLo (Man):** 2857 mg/Kg

**Trade Secret #2**

**Oral Rat LD50:** 5045 mg/Kg

**Inhalation Rat LC50:** 12,000 ppm/8 Hr.

**Irritation skin (rabbit):** 500 mg/24 Hr. Mild

**Trade Secret #3**

**Oral Rat LD50:** 14,500 mg/Kg

**Irritation skin (rabbit):** 500 mg/24Hr. Mild

**Irritation eye (rabbit):** 500 mg/24Hr. Mild

### 12. Ecological Information

**DATA DERIVED FROM MSDS FOR THE PREDOMINANT INGREDIENT**

When released into soil, this material is expected to readily biodegrade, to leach into ground water and to quickly evaporate. When released into water, this material is expected to biodegrade, quickly evaporate. This material has a log Octanol-water partition coefficient of less than 3. This material is not expected to significantly bio-accumulate. When released into air, this material may be moderately degraded by reaction with photo-chemically produced hydroxyl radicals, may be moderately degraded by photolysis, and is expected to readily be removed from the atmosphere by wet deposition.

### 13. Advice on Disposal

Absorb spillage onto sand or other absorbent material and dispose of as solid waste as per local regulations. Waste or spillage generated from usages of this product is considered hazardous waste and must be disposed and manifested under local regulations of management hazardous waste.

### 14. Transport Information

**Proper Shipping Name:** Flammable Liquid, N. O. S. (Acetone)

**Hazard Class/Division:** 3

**UN Number:** UN 1993

**UN Packaging Group:** II

**Other Shipping Information**

**Marking:** Flammable liquid with class 3 risk on the label

**Special Shipping Notes**

**IATA:** Flammable liquid, N. O. S. (Acetone), 3, UN 1993, PG II

### 15. Regulatory Information

**SARA Title III Sect. 302 (Extremely Hazardous Substances, 40 CFR 355):** This product does not contain any chemical subject to SARA Title III Section 302.

**SARA Title III Sect. 304:** This product does not contain any chemicals subject to SARA Title III Section 304.

**SARA Title III Sect. 313 (40 CFR 372):** This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

**SARA Title III Sect. 311/312 Categorization:** Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Flammable

**CA Proposition 65:** This product does not contain materials which the state of California has found to cause cancer, birth defects or other reproductive harm

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### **16. Other Information**

#### **NFPA Ratings:**

NFPA Code for Flammability – 3

NFPA Code for Health – 2

NFPA Code for Reactivity – 0

NFPA Code for Special Hazards – None

This Material Safety Data Sheet has been furnished on request. A revised Material Safety Data Sheet will be furnished only if requested, also in case of specification changes. The above information, which is accurate to the best of our knowledge and belief, describes the safety aspects of our product but does not warrant any product properties. The company gives no warranty as to the accuracy or completeness of such information. It is the user's responsibility to determine the suitability of the information for their particular purposes.

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