



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

<b>PRODUCT CODE</b>	N0137
<b>PRODUCT NAME</b>	NAT. 2,3,5,6-TETRAMETHYLPYRAZINE
<b>SUPPLIER</b>	Shanghai M & U International Trade Co., Ltd. Rm 1717, No 598 North NuJiang Road 200333 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

### 2. HAZARD IDENTIFICATION:

#### Emergency Overview

#### OSHA Hazards

Harmful by ingestion, Irritant

#### GHS Classification

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Serious eye damage (Category 1)

Specific target organ toxicity - single exposure (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram none

Signal word Danger

#### Hazard statement(s)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

#### Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves/ eye protection/ face protection.

P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### HMIS Classification

Health hazard 1

Flammability 1

Physical hazards 1

#### NFPA Rating

Health hazard 1

Fire 1  
Reactivity Hazard 0

**Potential Health Effects**

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.  
Skin Harmful if absorbed through skin. Causes skin irritation  
Eyes Causes eye irritation.  
Ingestion Harmful if swallowed

**3. COMPOSITION AND INFORMATION ON INGREDIENTS:**

**Formula** C8 H12 N2  
**Molecular Weight** 136.18 g/mol

CAS-No	EC-No	Index-No.	Concentration
1124-11-4	214-391-2		

**4. FIRST-AID GUIDE:**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

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

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING GUIDE:**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

**6. ACCIDENTAL RELEASE GUIDE:**

**Personal precautions**



Color	WHITE TO OFF WHITE TAN
<b>Safety data</b>	
pH	no data available
Melting point (°C)	80
Boiling point (°C)	185
Flash point (°F) Closed cup	>200
Vapor pressure (mmHg@20°C)	no data available
Density @25 °C	no data available
Water solubility	SOLUBLE
Partition coefficient: n-octanol/water	log Pow: 1.823
Relative vapor density	no data available
Odor	SWEET CHOCOLATE, COCOA

## 10. STABILITY AND REACTIVITY:

### Chemical stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents, strong acids

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION:

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 1,910 mg/kg

### Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

### Potential health effects

Inhalation                      May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion Harmful if swallowed.  
Skin May be harmful if absorbed through skin Causes skin irritation.  
Eyes Causes eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

RTECS: UQ3905000

**12. DISPOSAL RECOMMENDATIONS:**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**13. TRANSPORTATION INFORMATION:**

**DOT (US)**

Not dangerous goods.

**IMDG**

Not dangerous goods.

**IATA**

Not dangerous goods.

**14. REGULATORY INFORMATION:**

**OSHA Hazards**

Harmful by ingestion, Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

2,3,5,6-Tetramethylpyrazine	CAS-No.	Revision Date
	1124-11-4	

**New Jersey Right To Know Components**

2,3,5,6-Tetramethylpyrazine	CAS-No.	Revision Date
-----------------------------	---------	---------------

1124-11-4

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**15. OTHER INFORMATION:**

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.

Material Safety Data Sheet prepared by: **M & U International LLC**