# Avocado Research Chemicals Ltd - Material Safety Data Sheet 24110

### 1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER

Name On Label N,N,N,'N'-Tetramethyl-1,4-butanediamine

Product Number 24110

**Supplier** Johnson Matthey Catalog Company Inc.

30 Bond Street, Ward Hill, Massachusetts, 01835-8099

Emergency Telephone Number: (978) 521-6300; CHEMTREC: (800) 424-9300

Alternative Names None in common use.

### 2. COMPOSITION AND INFORMATION ON COMPONENTS

Name N,N,N,'N'-Tetramethyl-1,4-butanediamine

Minor Impurities Not determined

CAS No. 111-51-3 EINECS No. Not listed EEC No.

### 3. HAZARDS IDENTIFICATION

DesignationFLAMMABLE ~ CORROSIVERisk PhrasesR10FlammableR34Causes burns

### 4. FIRST AID MEASURES

**Inhalation** Remove to fresh air. In cases of serious discomfort seek medical attention.

Eye Contact
Skin Contact
Skin Contact
Flush with copious amounts of water for at least 15 minutes. Seek urgent medical attention.
Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. In case of skin damage seek urgent medical advice. Show the physician the container details.

Ingestion Rinse out mouth and drink lots of water. In case of tissue damage or other symptoms, seek medical

attention.

### 5. FIRE FIGHTING MEASURES

may be involved. In general, water-based extinguishers should not be used for fires involving

organic materials. Use carbon dioxide or dry powder.

**Protective Equipment** Wear self-contained breathing apparatus and protective clothing.

Hazardous Products of Combustion may include: carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, hydrogen

cyanide.

### 6. ACCIDENTAL RELEASE MEASURES

Personal Protection Keep away from ignition sources. Avoid inhalation of vapour. Wear protective equipment including

rubber gloves, eye protection and breathing equipment. Keep unprotected persons away.

**Environmental Protection** 

Collection

Take precautions to ensure product does not contaminate the ground or enter the drainage system.

Absorb in vermiculite or proprietary absorbent material and transfer to sealed containers for

disposal.

### 7. HANDLING AND STORAGE

**Handling** Chemicals should be used only by those trained in handling potentially hazardous materials. Rubber

gloves, eye protection and protective clothing should be worn. Operations should be carried out in

an efficient fume hood or equivalent system.

Storage Store in tightly sealed containers in a cool place.

Protect from moisture.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Respiratory** Avoid inhalation of product. Handle in an efficient fume hood or equivalent system.

Eye Avoid eye contact. Wear safety spectacles, goggles or, for larger quantities, a full face mask.

Hands and Body Corrosive product. Avoid skin contact. Wear corrosive-resitant gloves and, for larger quantities, full

arm and body protection. Wash hands thoroughly after handling.

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### 24110 continued.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical Constants b.p. 166-167° Molecular formula C<sub>8</sub>H<sub>20</sub>N<sub>2</sub>

Water solubility Flash Point C<sub>8</sub>H<sub>20</sub>N<sub>2</sub> **Formula Wt.** 144.26 **Density** 0.790

### 10. STABILITY AND REACTIVITY

Specific Hazard

**Incompatibilities** Acids. Strong oxidising agents. Acid chlorides. Acid anhydrides.

**Decomposition**Hazardous products of decomposition may include: carbon monoxide, carbon dioxide, oxides of

nitrogen, nitric acid, hydrogen cyanide.

### 11. TOXICOLOGICAL INFORMATION

RTECS No. Not listed

Acute Toxicity LD<sub>50</sub>: Not available

Causes burns.

Special Note Causes burns. Material is extremely destructive to mucous membranes, upper respiratory tract,

eyes and skin. Inhalation may be fatal. Symptoms may include burning sensation, coughing,

wheezing, laryngitis, headache, nausea and vomiting.

### 12. ECOLOGICAL EFFECTS

General Take care to prevent chemicals from entering the ground, water courses or drainage systems.

### 13. DISPOSAL CONSIDERATIONS

**Disposal** Disposal should be via an approved contractor and should take full account of local regulations.

### 14. TRANSPORT INFORMATION

**UN Number** 

Land TransportADR/RIC Code/ClassPacking Group n/aMaritime TransportIMDG Code/ClassPacking Group n/aAir TransportIATA Code/ClassPacking Group n/a

### 15. REGULATORY INFORMATION

CAS No. 111-51-3 EINECS No. Not listed EEC No. UN No. None RTECS No. Not listed

Hazard Indication FLAMMABLE ~ CORROSIVE

Risk & Safety Phrases Flammable.

Causes burns.

Keep away from sources of ignition - No Smoking.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Take off immediately all contaminated clothing.

Wear suitable protective clothing, gloves and eye/face protection.

**TSCA** 

### 16. OTHER INFORMATION

It must be recognised that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Date of Last Review:** 1st June 2000 **Date Printed:** 13th November 2000