# Avocado Research Chemicals Ltd - Material Safety Data Sheet 21193

### 1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER

Name On Label 2-Cyanoethyl dichlorophosphite

Product Number 21193

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** 2-Cyanoethyl phosphorodichloridite

## 2. COMPOSITION AND INFORMATION ON COMPONENTS

Name 2-Cyanoethyl dichlorophosphite

Minor Impurities Not determined

CAS No. 76101-30-9 EINECS No. Not listed EEC No.

### 3. HAZARDS IDENTIFICATION

**Designation** HARMFUL ~ IRRITANT

Risk Phrases R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

## 4. FIRST AID MEASURES

**Inhalation** Remove to fresh air. If breathing is difficult give oxygen and seek medical attention.

Eye Contact Flush with copious amounts of water for at least 15 minutes. If irritation persists, seek medical

attention.

Skin Contact Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. If

irritation persists or other symptoms are observed, seek medical advice.

Ingestion Rinse out mouth and drink lots of water. In case of irritation 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, hydrogen chloride (hydrochloric acid),

oxides of nitrogen, nitric acid, phosphorus pentoxide, phosphoric acid, hydrogen cyanide.

# 6. ACCIDENTAL RELEASE MEASURES

Personal Protection Avoid inhalation or contact of spilled material with skin or clothing. Wear protective equipment

including rubber gloves, and eye protection. Keep unprotected persons away.

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

**Collection** Mix with 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.

Product reacts with water. Take precautions to avoid contact with atmospheric 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 Irritant product. Avoid skin contact. Wear rubber gloves, protective clothing and, for larger

quantities, full arm, body and face protection. Wash hands thoroughly after handling.

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# 21193 continued.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Liquid

Physical Constants b.p. 68-72°/0.2mm Molecular formula C<sub>3</sub>H<sub>4</sub>Cl<sub>2</sub>NOP Water solubility

Flash Point Not available

Formula Wt. 171.95
Density Not available

### 10. STABILITY AND REACTIVITY

Specific Hazard

**Incompatibilities** Strong oxidising agents.

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

chloride (hydrochloric acid), oxides of nitrogen, nitric acid, phosphorus pentoxide, phosphoric acid,

hydrogen cyanide.

# 11. TOXICOLOGICAL INFORMATION

RTECS No. Not listed

**Acute Toxicity** LD<sub>50</sub>: No data reported

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and

skin.

### 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 3278

Land TransportADR/RIC Code/Class6.1Packing Group IIIMaritime TransportIMDG Code/Class6.1Packing Group IIIAir TransportIATA Code/Class6.1Packing Group III

### 15. REGULATORY INFORMATION

CAS No. 76101-30-9 EINECS No. Not listed EEC No. UN No. 3278 RTECS No. Not listed

Hazard Indication HARMFUL ~ IRRITANT

Risk & Safety Phrases Harmful by inhalation, in contact with skin and if swallowed.

Irritating to eyes, respiratory system and skin.

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

Wear suitable gloves and eye/face protection.

**TSCA** Not listed. For research and development use only.

# 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: 3rd August 1998 Date Printed: 18th September 1998