

# Avocado Research Chemicals Ltd - Material Safety Data Sheet 21137

1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER			
Name On Label	Diethylchlorophosphine		
Product Number	21137		
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	Chlorodiethylphosphine		
2. COMPOSITION AND INFORMATION ON COMPONENTS			
Name	Diethylchlorophosphine		
Minor Impurities	Not determined		
CAS No.	686-69-1	EINECS No. 2116894	EEC No.
3. HAZARDS IDENTIFICATION			
Designation	HIGHLY FLAMMABLE ~ CORROSIVE ~ LACHRYMATORY		
Risk Phrases	R11	Highly flammable.	
	R34	Causes burns.	
	R14	Reacts violently with water.	
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. Seek urgent medical attention.		
Skin Contact	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			
Extinguishing Medium	Use fire fighting measures which suit the environment and take into account other materials which 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), phosphorus pentoxide, phosphoric acid.		
6. ACCIDENTAL RELEASE MEASURES			
Personal Protection	Avoid inhalation or contact of vapour with eyes. Wear protective equipment including rubber gloves, safety goggles or breathing equipment. Keep unprotected persons away.		
Environmental Protection	Take precautions to ensure product does not contaminate the ground or enter the drainage system.		
Collection	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. Product reacts with water. Take precautions to avoid contact with atmospheric moisture.		
8. EXPOSURE CONTROLS AND PERSONAL PROTECTION			
Respiratory	Volatile product. Avoid inhalation of vapour. 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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9. PHYSICAL AND CHEMICAL PROPERTIES				
Appearance	Colorless liquid			
Physical Constants	b.p. 133-134°			
Molecular formula	C <sub>4</sub> H <sub>10</sub> CIP	Formula Wt.	124.55	
Water solubility		Density	1.02	
Flash Point	19°			
10. STABILITY AND REACTIVITY				
Specific Hazard	Reacts violently with water.			
Incompatibilities	Strong oxidising agents. Reacts violently with water.			
Decomposition	Hazardous products of decomposition may include: carbon monoxide, carbon dioxide, hydrogen chloride (hydrochloric acid), phosphorus pentoxide, phosphoric acid.			
11. TOXICOLOGICAL INFORMATION				
RTECS No.	Not listed			
Acute Toxicity	LD <sub>50</sub> : No data reported 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	2924			
Land Transport	ADR/RIC Code/Class	3.2	Packing Group II	
Maritime Transport	IMDG Code/Class	3.2	Packing Group II	
Air Transport	IATA Code/Class	3.2	Packing Group II	
15. REGULATORY INFORMATION				
CAS No. 686-69-1	EINECS No. 2116894	EEC No.	UN No. 2924	RTECS No. Not listed
Hazard Indication	HIGHLY FLAMMABLE ~ CORROSIVE ~ LACHRYMATORY			
Risk & Safety Phrases	Highly flammable. Causes burns. Reacts violently with water. 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	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