

Avocado Research Chemicals Ltd - Material Safety Data Sheet 15321

1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER			
Name On Label	1,4,10,13-Tetrathia-7,16-diazacyclooctadecane		
Product Number	15321		
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	7,16-Diaza-1,4,10,13-tetrathiacyclooctadecane		
2. COMPOSITION AND INFORMATION ON COMPONENTS			
Name	1,4,10,13-Tetrathia-7,16-diazacyclooctadecane		
Minor Impurities	Not determined		
CAS No.	20934-69-4	EINECS No.	Not listed
		EEC No.	
3. HAZARDS IDENTIFICATION			
Designation	IRRITANT		
Risk Phrases	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			
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, oxides of nitrogen, nitric acid, sulfur dioxide, sulfuric acid, hydrogen cyanide.		
6. ACCIDENTAL RELEASE MEASURES			
Personal Protection	Wear protective equipment including rubber gloves, and eye protection. Keep unprotected persons away.		
Environmental Protection Collection	Take precautions to ensure product does not contaminate the ground or enter the drainage system. 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. 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	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.		

Continued on next page...

15321 continued.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance			
Physical Constants	m.p. 123-124°		
Molecular formula	C ₁₂ H ₂₆ N ₂ S ₄	Formula Wt.	326.61
Water solubility		Density	Not available
Flash Point	Not available		

10. STABILITY AND REACTIVITY

Specific Hazard

Incompatibilities	Strong oxidising agents.
Decomposition	Hazardous products of decomposition may include: carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, sulfur dioxide, sulfuric acid, hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION

RTECS No.	Not listed
Acute Toxicity	LD ₅₀ : No data reported 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	
Land Transport	ADR/RIC Code/Class Not Restricted
Maritime Transport	IMDG Code/Class Not Restricted
Air Transport	IATA Code/Class Not Restricted

15. REGULATORY INFORMATION

CAS No. 20934-69-4	EINECS No. Not listed	EEC No.	UN No. None	RTECS No. Not listed
---------------------------	------------------------------	----------------	--------------------	-----------------------------

Hazard Indication	IRRITANT
--------------------------	----------

Risk & Safety Phrases	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 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: 3rd August 1998

Date Printed: 18th September 1998