

Avocado Research Chemicals Ltd - Material Safety Data Sheet 21056

1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER			
Name On Label	S-(+)-1,3-Butanediol		
Product Number	21056		
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	S-(+)-1,3-Dihydroxybutane		
2. COMPOSITION AND INFORMATION ON COMPONENTS			
Name	S-(+)-1,3-Butanediol		
Minor Impurities	Not determined		
CAS No.	24621-61-2	EINECS No. 2463630	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.		
6. ACCIDENTAL RELEASE MEASURES			
Personal Protection	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 is hygroscopic. 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.		

Continued on next page...

21056 continued.

9. PHYSICAL AND CHEMICAL PROPERTIES			
Appearance	Viscous colorless liquid		
Physical Constants	b.p. 108-110°/14mm		
Molecular formula	C ₄ H ₁₀ O ₂	Formula Wt.	90.12
Water solubility	Sol	Density	1.00
Flash Point	121°		
10. STABILITY AND REACTIVITY			
Specific Hazard			
Incompatibilities	Oxidising agents. Reducing agents. Acid chlorides. Acid anhydrides. Chloroformates.		
Decomposition	Hazardous products of decomposition may include: carbon monoxide, carbon dioxide.		
11. TOXICOLOGICAL INFORMATION			
RTECS No.	Not listed		
Acute Toxicity	LD ₅₀ : No data reported Irritating to eyes, respiratory system and skin.		
Special Note	Symptoms of exposure may include nausea, dizziness and headache. Symptoms of exposure may include gastrointestinal disturbances.		
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. 24621-61-2	EINECS No. 2463630	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	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