Alfa Aesar/Avocado Organics – Material Safety Data Sheet A11518

1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER Name On Label : 1,3-Dinitrobenzene Product Number : A11518 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 :

1,3–Dinitrobenzene MinorImpurities : Not determined CAS Number : 99–65–0 EINECS Number : 2027768 EEC Number :

3. HAZARDS IDENTIFICATION Designation : VERY TOXIC Risk Phrases R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed. R33 Danger of cumulative effects.

4. FIRST AID MEASURES Inhalation Remove to fresh air. Seek medical attention. Show the physician the container details.

Eye Contact

Flush with copious amounts of water for at least 15 minutes. Seek medical advice. Show the physician the container details.

Skin Contact

Remove contaminated clothing. Wash affected area with soap and water. Rinse thoroughly. Seek medical advice. Show the physician the container details.

Ingestion Rinse out mouth and drink lots of water. Seek urgent medical attention and show physician the container details.

5. FIRE FIGHTING MEASURES Extiguishing 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, 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. 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 or goggles.

Hands and Body Avoid skin contact. Wear rubber gloves and protective clothing. Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES Appearance : Orange powder Physical Constants: m.p. 88–90° Molecular Formula : C6H4N2O4 Formula Weight : 168.11 Water Solubility : SI sol Density : 1.368 Flash Point : Not available

10. STABILITY AND REACTIVITY Specific Hazard Incompatibilities Oxidising agents. Reducing agents. Strong bases.

Decomposition Hazardous products of decomposition may include: carbon monoxide, carbon dioxide, oxides of nitrogen, nitric acid, hydrogen cyanide.

11. TOXICOLOGICAL INFORMATION RTECS Number : CZ7350000 Acute Toxicity LD50 : ORL-RAT 83mg/kg

Very toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects.

Special Note

Absorption may lead to the formation of methemoglobin. In sufficient concentrations this may cause cyanosis (blue–grey colouring of lips and skin caused by lack of oxygen). Effects may be delayed by several hours. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

Chronic Toxicity

May cause damage to the blood. May cause damage to the liver. May cause damage to the reproductive

system.

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 : 1597 Land Transport ADR/RIC Code/Class: 6.1 /Packing Group I Maritime Transport IMDG Code/Class : 6.1 /Packing Group I Air Transport IATA Code/Class : 6.1 /Packing Group I

15. REGULATORY INFORMATION CAS Number : 99–65–0 EINECS Number : 2027768 EEC Number : UN Number : 1597 RTECS Number : CZ7350000 Hazard Indication : VERY TOXIC

Risk and Safety Phrases Very toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects.

Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

TSCA: Listed substance.

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

12. ECOLOGICAL EFFECTS General Take care to prevent chemicals from entering the ground, water course

Date Printed : 18th September 1998