



Material Safety Data Sheet

MATRIX NUTRITION

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Dry Natural Vitamin E 50
Product Code: VTM – 1000, VTM -1100
Use: Feed Additive
Company Information: Matrix Nutrition, LLC
4120 N. 38th Drive – Phoenix, Az - 85019
Phoenix, AZ 85040 Phone: 602-621-4944

SECTION 2 HAZARDS IDENTIFICATION

Form: Granular Meal
Color: Brown to Reddish Brown
Odor: Citrus
Hazard Overview: Possible dust explosion hazard based on information on Related materials
Potential Health Effects: Exposure: Inhalation, Ingestion, Skin contact, Eye Contact
Target Organs: Gastrointestinal System
Acute Effects: May cause skin irritation. May cause gastrointestinal effects. Signs and symptoms may include nausea, vomiting, diarrhea, constipation, cramps and loss of appetite,
Chronic Effects: no adverse effects known
Carcinogenicity: formulation not listed by NTP, IARC or OSHA

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Characterization: Preparation containing Natural vitamin E (dl-ox-tocopheryl acetate) and auxiliary substances; for food

Ingredients	Concentration
dl-ox Tocopheryl Acetate	≥ 50%
Citrus Meal	≤ 50%
Sililcon dioxide:	≤ 5%
CAS: 7631-86-9	

SECTION 4 FIRST AID MEASURES

Eye Contact: Rinse with tap water for 10 minutes – open eyelids forcibly
Consult a physician if irritation persists

Skin Contact: Remove immediately contaminated clothes wash affected skin with water and soap – do not use any solvents

Inhalation: Remove the casualty to fresh air and keep him/her calm
In the event of symptoms get medical treatment

Note to Physician: Treat symptomatically



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SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray jet, dry powder, foam, carbon dioxide

Flash point (Liquid) not applicable

Consider dust explosion hazard

*1 referring to: Dry Natural Vitamin E 50Acetate

SECTION 6 ACCIDENTAL RELEASE NUMBERS

Methods for cleaning up Collect solids (avoid dust formation) and hand over to waste removal
Rinse with plenty of water

SECTION 7 HANDLING AND STORAGE

Handling

Technical measures: Processing in closed systems, if possible superposed by inert gas (e.g., nitrogen) *1

Local exhaust ventilation necessary *1

Take precautionary measures against electrostatic charging *1

Avoid dust formation; very high dust explosion hazard *1

Suitable materials: Stainless steel, aluminum, enamel, glass, polyethylene

Storage

Storage conditions: Protected from light
Protected from humidity
Room temperature

Validity: 36 months, < 25° C, inb the unopened original container, see "best use before" date stated on the label

Packaging materials: Tightly closing; material: stainless steel, aluminium, enamel, Food-approved plastics

*1 referring to: Dry Natural Vitamin E 50 Acetate 50%

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: See 7

Monitoring

Threshold value (USA)air -ACGIH-OTLV: 10 mg/m³ *2

-OSHA-PEL: 5mg/m³ (respirable fraction) *2

-OSHA-PEL: 15 mg/m³ (total dust) *2

-NIOSH-REL: 5mg/m³ (respirable fraction) *2

-NIOSH-REL: 15mg/m³ (total dust) *2

-ACGIH-TLV: 10 mg/m³ (total particulate) *3

-OSHA-PEL: 6 mg/m³ *3

Threshold value (DSM/Roche) -IOEL: 10 mg/m³ (inert dust limit value) *1

air
Analytics Sampling on glass fibre filter and gravimetric or chemical Determination (consider possible autooxidation)



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Personal Protective Equipment

Respiratory protection
Respiratory protection not necessary during normal operations

Respiratory protection not necessary during normal operations

In case of very high dust concentrations: particle mask or

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Color:	Brown to reddish Brown		
Form:	Granular Meal		
Odor:	Citrus		
Sieve analysis:	≥ 60 % through	USP standard sieve no. 8	
Solubility:	Dispersible, water		

SECTION 10 STABILITY AND REACTIVITY

Stability:	Stable under the conditions mentioned in chapter 7		
Conditions to avoid:	Humidity Light		
Materials to avoid:	Bases, strong acids		*4
	Oxidizing agents		*4
	Iron, silver, and metal salts		*4
	Note:	At elevated temperatures (> 80° C) autooxidation is possible in the presence of oxygen *1	
	Strong exothermal decomposition above 155° C *1		

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity	-LD ₅₀	>4000	mg/kg	(oral,rat)	*4
	-LD ₅₀	>4000	mg/kg	(oral,mouse)	*4
	-LD ₅₀	840	mg/kg	(i.p., rat)	*4
	-LD ₅₀	>3000	mg/kg	(dermal,rat)	*4
Local effects	Eye: non-irritant (rabbit)				*4
	Skin: may be slightly irritating (several species)				*4
Mutagenicity	Not mutagenic (various test systems)				*4
Carcinogenicity	Not carcinogenic				*4
Reproduction toxicity	Not teratogenic				*4
Note:	High doses may cause nausea, vomiting, diarrhea, fatigue and weakness				*5
	Intensive skin contact may cause contact dermatitis				*5
	RDA (Recommended Dietary Allowance) 8-10 mg/day				*5
*4 referring to:	dl-ox-Tocopheryl acetate				
*5 referring to:	dl-ox-Tocopherol				

SECTION 12 ECOLOGICAL INFORMATION

Ready Biodegradability	Not readily biodegradable			
	17%, 28 days	(Manometric Respirometry Test, OECD No. 301 F)		*4
Inherent Biodegradability	Well inherently biodegradable			*4
	84%, 28 days	(MITI Test 1; OECD No. 302C)		

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Ecotoxicity	Barely toxic for fish (normal concentration – 100 mg/l), no chronic toxic effects have been observed at or above solubility limit (rainbow trout) NOEC (28d) 100 mg/l (nominal concentration) OECD No. 215, Fish Juvenile Growth Test	*4
	Barely toxic for planktonic crustaceans (nominal concentration = 100 mg/l), test performed with water accommodated fractions (Daphnia magna) NOEC (48h) 100 mg/l (nominal concentration) EC ₅₀ (48h) > 100 mg/l (nominal concentration) OECD No. 202	*4
Air pollution referring to:	Observe local/national regulations dl-ox Tocopheryl acetate	*4

SECTION 13 DISPOSAL CONSIDERATIONS

Waste from residues	Observe local/national regulations regarding waste disposal
RCRA waste:	Not regulated under RCRA

SECTION 14 TRANSPORT INFORMATION

DOT/TDG Remark:	Not regulated for transport under DOT, TDG, IATA or IMDG
Note:	Not classified as hazardous under DOT, IATA, IMDG

SECTION 15 REGULATORY INFORMATION

US Regulations	Law: hazardous chemical reporting: community right-to-know Common name: SARA title 312 Agency: Environmental Protection Agency EPA Criteria met: Non-hazardous
US and CAN hazard	Some components of this product are identified under the classification Canadian Hazardous Product Ingredient Disclosure List. Components of this product are identified on the Canadian Domestic Substance List or the Non-Domestic Substance List This product is not considered hazardous under the criteria Specified in 29 CFR 1910.1200 (Hazard Communication Standard) and is not a controller product under the Canadian Controlled Products Act. None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) or CERCLA (40 CFR 302.4).
TSCA Status	All ingredients are on the TSCA InventoryReporting Requirements: The United States Environmental Protection Agency (USEPA) has not established a Reportable Quantity (RQ) for releases of this material.



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SECTION 16	OTHER INFORMATION
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Canada update:	This MSDS has been reviewed on _____ for compliance with Canadian regulation
Biological Activity:	1 I.U. (International Unit) of vitamin E corresponds to the Activity of 1.0 mg. pure dl-ox-tocopheryl acetate *4
Edition documentation:	Changes from previous version in sections 2,4,8,11,12,13,16
*4 referring to:	dl-ox Tocopheryl acetate

Definitions: ACGIH = American Conference of Governmental Industrial Hygienists. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. DSL = Canadian Domestic Substance List. DOT = Department of Transportation. EINECS = European Inventory of New and Existing Chemical Substances. EPA = Environmental Protection Agency. HEPA = High Efficiency Particulate Air. HMIS = Hazardous Material Identification System. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IMDG = International Maritime Dangerous Good. IOEL = Roche/DSM developed Internal Occupational Exposure Limit. NFPA = National Fire Protection Association. NIOSH = National Institute of Occupational Safety and Health. NJTSR = New Jersey Trade Secret Registry. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. NA = Not available or Not Applicable. SARA = Superfund Amendments and Reauthorization Act. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act. WHMIS = Workplace Hazardous Materials Information System.

Disclaimer: The information contained herein is believed to be accurate at the time of publishing and is offered in good faith. This information relates only to the specific material designated and may not be valid for such material in combination with other materials or in any process. Mixing this product with any other materials may change the characteristics such as flash point, flammability or health effects. Because the product use is beyond the control of the authoring body, no warranty is given, expressed or implied.

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