



MATERIAL SAFETY DATA SHEET

ESFC – Defender – Plant Protector & Soil Conditioner

I. PRODUCT IDENTIFICATION

Product Identifier: ESFC – Plant Protector
Product Code: 3002
Class: 60 NON-HAZ
IHC: 3402.20.51.00
Manufacturer: Earth Smart Solutions
Address: 120 – 60 Industry Way S.E., Calgary, AB., CA. T3S 0A2
Toll Free: 1-866-444-7174
Fax: 403-264-9606

II. HAZARDOUS INGREDIENTS

Hazardous Components: None – GRAS (Generally recognized as safe)

III. PHYSICAL / CHEMICAL DATA

Form: Liquid
Color: Brown
Odor: Neutral
Boiling Point: 85C
Freezing Point: 0C
pH: 3.68 Concentrated State
Solubility: 99.9%
Specific Gravity: 1.0
Evaporation Rate (Water=1"): 10

IV. FIRE & EXPLOSION DATA

Flammable or combustible: Not flammable or combustible
Flash point (deg. C): None
Upper flammable limit: N/A
Lower flammable limit: N/A
Auto ignition temperature: N/A
Flammability classification: N/A
Conditions of flammability: N/A
Special fire fighting procedures: N/A
Hazardous combustion products: N/A
Sensitive to mechanical impact: No
Sensitive to static discharge: No



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V. REACTIVITY DATA

Is the product stable?	Yes – stable
Conditions of reactivity:	None known
Incompatible substances:	None known
Hazardous decomposition products:	None
Hazardous Polymerization:	Does not occur

VI. TOXICOLOGICAL PROPERTIES

Primary routes of exposure:	Eye contact and Ingestion
Sensitizer:	Not known to be a sensitizer
Carcinogen:	No – IARC, NTP, OSHA
Mutagen:	Not known to be a mutagen

VII. PREVENTION MEASURES

Gloves:	No special requirements
Respirator:	No special requirements
Eye protection:	No special requirements
Footwear:	No special requirements
Clothing:	No special requirements
Other:	No special requirements
Engineering controls:	No special requirements
Leak & Spill procedures:	Flush away with water
Waste Disposal:	Flush to sewer
Special shipping information:	None required

VIII. SAFETY

ESFC is produced in accordance with NOSB (National Organic Standards Board) guidelines. The materials used in the production process are derived from naturally occurring and sustainable sources and are consistent with organic principals and the National List of Allowed Substances. ESFC does NOT contain synthetic chemicals, animal components, animal by-products, manure or manure by-products. ESFC is environmentally safe, is not harmful to animals, plants and humans.

IX. COMPLIANCE

The materials, used in the production of ESFC fully comply with EPA Toxic Substance Control Act (TSCA) and the rules, orders and regulations promulgated there under including:

- a) Sections 4, 5, 6 & 7; Title 40 Chapter 1, 707.20 thru 707.75;
- b) 40 CFR Sections 704.3. 710.2(e) and 720.3(c); and



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- c) Sections 5 and 13, reference 42FR64583
- d) Does not contain marine pollutants as defined in 49 CFR 171.8.

X. PREPARATION DATA

Information sources: Suppliers MSDSs, DSL, TSCA, EPA, IARC, NTP, OSHA.
Acute Oral Toxicity Tests (OECD 404) E-826
Dermal Irritation Test (OECD 404) E-827
Dermal Irritation Test (OECD 404) 0199PTOX0001

Preparation date: Rev. June 21, 1999

Revised: January 12, 2000 – Rev. May 16, 2006

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