

MATERIAL SAFETY DATA SHEET

DOUBLE THREAT™ CP



MSDS Ref. No.: F18-35-9
Date Approved: 09/27/2004
Revision No.: 2

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 2001/58/EC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DOUBLE THREAT™ CP

PRODUCT CODE: 6192

ACTIVE INGREDIENT(S): Bifenthrin*; Spinosad**

CHEMICAL FAMILY: *Pyrethroid Insecticide; **Naturalyte

MOLECULAR FORMULA: *C₂₃H₂₂ClF₃O₂; **C₄₂H₆₇NO₁₀

SYNONYMS: FMC 54800; (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate; IUPAC: 2-methylbiphenyl-3-ylmethyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate*;
Spinosyn A: 2-((6-deoxy-2,3,4-tri-O-methyl-α-L-mannopyranosyl)oxy)-13-((5-dimethylamino)tetrahydro-6-methyl-2H-pyran-2-yl)oxy)-9-ethyl-2,3,3A,5A,5B,6,9,10,11,12,13,14,16a,16b-tetra-decahydro-14-methyl-1H-as-indaceno(3,2-d)oxacyclododecin-7,15-dione; Spinosyn D: 2-((6-deoxy-2,3,4-tri-O-methyl-α-L-mannopyranosyl)oxy)-9-ethyl-2,3,3a,5a,5b,6,9,10,11,12,13,14,16a,16b-tetradecahydro-4-14-eimethyl-1H-as-indaceno(3,2-d)oxacyclododecin-7,15-dione**

*Information for Bifenthrin; ** Information for Spinosad

MANUFACTURER

FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
(215) 299 6000 (General Information)

EMERGENCY TELEPHONE NUMBERS

(800) 424-9300 (CHEMTREC - U.S.A. & Canada)
(202) 483-7616 (CHEMTREC - All Other Countries)
(800) 331-3148 (FMC - U.S.A. & Canada)
(716) 735-3765 (Reverse charges - FMC)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- *Amber liquid with an aromatic hydrocarbon odor / ** Off-white to tan liquid suspension with low odor.
- *Moderately combustible. May support combustion if heated above the product's flash point (see Section 9, "Physical and Chemical Properties" below).
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- Highly toxic to fish and aquatic organisms. Keep out of drains and water courses.
- This product, as a mixture, is expected to have moderate oral toxicity.

POTENTIAL HEALTH EFFECTS: Effects from overexposure result from either swallowing or coming into contact with the skin. Symptoms of overexposure to Bifenthrin 2 EC includes tremors, convulsions, incoordination, decreased locomotion and nasal discharge. Contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside within 12 hours.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

COMMENTS: * Information for Bifenthrin 2 EC; ** Information for Spinosad

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. %	EC No.	EC Class
Bifenthrin	82657-04-3	25.1	None	R25; R50/53; S46-57
Spinosad		44.2	None	Not classified
Spinosyn A	131929-60-7		None	Not classified
Spinosyn D	131929-63-0		None	Not classified
Aromatic Hydrocarbons	64742-95-6	<21.22	265-199-0	R10, 37, 51/53, 65, 66, 67; S23, 24, 43A, 57, 60, 62
1,2,4-trimethylbenzene	95-63-6	<12	202-436-9	R10-20-36/37/38-51/53; S2-26-61
Surfactant Blend		<7	None	Not classified
Xylene	1330-20-7	<1.1	215-535-7	R10-20/21-38; S2-25
Ethylbenzene	100-41-4	<0.04	202-849-4	R11-20; S2-16-24/25-29
Cumene	98-82-8	<0.5	202-704-5	R10-37-51/53-65; S2-24-37-61-62

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Propylene Glycol	57-55-6	>1	200-338-0	Not classified
1-butanol	71-36-3	0.6	200-751-6	R10, 22, 37/38, 41, 67; S2-7/9-13-26-37/39-46

COMMENTS: Spinosad - mixture of Spinosyn A and Spinosyn D

4. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor immediately.

SKIN: Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. See a medical doctor immediately.

INGESTION: Do not induce vomiting and do not give liquids of any kind to the person. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, see a medical doctor. If breathing has stopped, give artificial respiration and see a medical doctor immediately.

NOTES TO MEDICAL DOCTOR: This product, as a mixture, is expected to have moderate oral, and low dermal and inhalation toxicity. It is expected to be irritating to the eyes and non-irritating to the skin. Aromatic hydrocarbons can produce a severe pneumonitis or fatal pulmonary edema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO₂ or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

FIRE / EXPLOSION HAZARDS: Moderately combustible. When heated above the flash point, this material releases vapors which, when mixed with air, can burn or be explosive.

FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the area.

Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

7. HANDLING AND STORAGE

HANDLING AND STORAGE: Bifenthrin 2 EC and Spinosad: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals.

Bifenthrin 2 EC: Do not freeze. Do not store below 4°C (40°F). If crystals are observed, warm material to above 15°C (60°F) by room heating only. Do not use external source of heat for warming container. Shake container periodically to re-dissolve crystals. Carefully open containers. After partial use, replace lids and close tightly. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust at all process locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For splash, mist or spray exposure, wear chemical protective goggles or a face shield.

RESPIRATORY: For splash, mist or spray exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

PROTECTIVE CLOTHING: Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and

watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

GLOVES: Wear chemical protective gloves made of materials such as nitrile, neoprene or Viton® brand. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

WORK HYGIENIC PRACTICES: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking or using tobacco. Shower at the end of the workday.

COMMENTS:

Personal protective recommendations for mixing or applying this product are prescribed on the product label. Information stated above provides useful, additional guidance for individuals whose use or handling of this product is not guided by the product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Aromatic hydrocarbon
APPEARANCE:	* Amber liquid / ** Off-white to tan liquid suspension
DENSITY / WEIGHT PER VOLUME:	* 7.91 lb/gal (950 g/L); ** 9.1 lb/gal (1090 g/L)
FLASH POINT:	42 °C (108 °F) (CC)Bifenthrin 2 EC
MOLECULAR WEIGHT:	422.88 (bifenthrin)
SOLUBILITY IN WATER:	*Emulsifies; **Dispersible
SPECIFIC GRAVITY:	*0.95 @ 20°C (water = 1); **1.09 g/mL

COMMENTS:

* Information for Bifenthrin 2 EC; ** Information for Spinosad

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Excessive heat and fire.
STABILITY:	Bifenthrin 2 EC: Stable Spinosad: Thermally stable at typical use temperatures. Some components of this product can decompose at elevated temperatures.
POLYMERIZATION:	Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: No data available for the mixture.

Bifenthrin 2 EC: Minimally irritating

Spinosad: Slightly irritating

SKIN EFFECTS: No data available for the mixture.

Bifenthrin 2 EC: Non-irritating (rabbit)

Spinosad: Non-irritating (rabbit)

DERMAL LD₅₀: No data available for the mixture.

Bifenthrin 2 EC: > 2,000 mg/kg (rabbit)

Spinosad: > 5,000 mg/kg (rabbit)

ORAL LD₅₀: No data available for the mixture.

Bifenthrin 2 EC: 262 mg/kg (rat)

Spinosad: > 5,000 mg/kg (rat, mouse)

INHALATION LC₅₀: No data available for the mixture.

Bifenthrin 2 EC: 1.86 mg/l (4 h) (rat)

SENSITIZATION: Bifenthrin 2 EC: Produced skin sensitization (allergic reaction) in laboratory animals and may produce similar symptoms in humans.

ACUTE EFFECTS FROM OVEREXPOSURE: This product, as a mixture, is expected to have moderate oral, and low dermal and inhalation toxicity. It is expected to be irritating to the eyes and non-irritating the skin.

A single prolonged dermal exposure to Spinosad is not likely to result in the material being absorbed through the skin in harmful amounts. Swallowing amounts larger than normal handling may cause injury. A single exposure to the concentrate mist is not likely to cause adverse effects.

Inhalation of aromatic hydrocarbon vapors may cause dizziness, disturbances in vision, drowsiness, respiratory irritation, and eye, skin and mucous membrane irritation. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into the lungs, which may result in fatal pulmonary edema. Exposure to butanol vapors may produce headaches, drowsiness and irritation of the nose and throat. Excessive exposures to butanol liquid or vapors may result in contact dermatitis and irritation of the mucous membranes. In humans, ingestion of large amounts of propylene glycol has resulted in symptoms of reversible central nervous system depression including stupor, rapid breathing and heartbeat, profuse sweating and seizures.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product as a mixture.

No data available for Bifenthrin 2 EC. Information is based on the active ingredient. In studies with laboratory animals, bifenthrin did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to bifenthrin. In lifetime feeding studies conducted with rodents, a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound related effect. An overall absence of genotoxicity has been demonstrated in mutagenicity tests with bifenthrin.

In studies with laboratory animals, Spinosad has been shown to cause vacuolation of cells in various tissues and changes in blood and serum biochemistry. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use. In studies with laboratory animals, Spinosad was

not carcinogenic, mutagenic or teratogenic. Effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings, and liver and kidney damage. Inhalation of xylene vapors at high doses has also resulted in an increase incidence of malformations and decreases in fetal weight in laboratory animals. Damage from xylene may be potentiated by alcohol. Disturbances in hearing and balance have been reported in workers exposed to butanol vapors. Repeated overexposure to propylene glycol can produce central nervous system depression, hemolysis and minimal kidney damage. Under the conditions of 2-year inhalation studies, conducted by the National Toxicology Program (NTP), there was clear evidence of carcinogenic activity of ethylbenzene in male rats based on increased incidences of renal tubule neoplasms. The incidences of testicular adenoma were also increased. There was some evidence of carcinogenic activity in female rats based on increased incidences of renal tubule adenomas. There was some evidence of carcinogenic activity in male mice based on increased incidences of alveolar/bronchiolar neoplasm. There was some evidence of carcinogenic activity in female mice based on increased incidences of hepatocellular neoplasms. Studies conducted by the International Agency for Research on Cancer (IARC) showed that there is inadequate evidence in humans for the carcinogenicity of ethylbenzene and that there is sufficient evidence in experimental animals; therefore, the overall evaluation shows that ethylbenzene is possibly carcinogenic to humans (Group 2B). Chronic exposure to trimethylbenzene may cause CNS changes, asthmatic bronchitis and blood dyscrasias.

CARCINOGENICITY:

Chemical Name	IARC	NTP	OSHA	Other
Ethylbenzene	Listed	Listed	Not listed	(ACGIH) Not listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Bifenthrin 2 EC:

No data available. Information is based on the active ingredient. Bifenthrin has moderate stability in the soil under aerobic conditions (half-life range from 65 - 125 days depending on soil type) and is stable at a wide range of pH values. Bifenthrin has a high Log Pow (> 6.0), a high affinity for organic matter, is not mobile in soil and therefore has little potential for movement into ground water. There is, however some potential for bioconcentration (bioconcentration factor = 11,750).

Spinosad:

No data available. Information is based on the active ingredient(s). Bioconcentration potential is low (BCF <100 or Log Pow <3).

Spinosyn A:

Bioconcentration factor in fish is 19. Photolysis half-life in soil is 8.68 days; the photolysis half-life in pH 7 buffer is 0.96 days. Under aerobic soil conditions the half-life is 9.4 and 17.3 days.

Spinosyn D:

Bioconcentration factor in fish is 33. Photolysis half-life in soil is 9.44 days; the photolysis half-life in pH 7 buffer is 0.84 days.

ECOTOXICOLOGICAL INFORMATION: Bifenthrin 2 EC:

No data available. Information is based on the active ingredient. Bifenthrin is highly toxic to fish and aquatic arthropods and LC₅₀ values range from 0.0012 mg/l to 17.8 mg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds (LD₅₀ values range from 1800 mg/kg to >2150 mg/kg).

Spinosad:

Material is slightly toxic to aquatic organisms on an acute basis (LC₅₀ / EC₅₀ between 10 and 100 mg/L in most sensitive species).

Acute immobilization EC₅₀ in water flea (daphnia magna) is 16.9 mg/L

Acute LC₅₀ in water flea (Daphnia magna) is >90.9 mg/L

Acute LC₅₀ in zebra fish (Brachydanio rerio) is > 120 mg/L

Acute LC₅₀ in common carp (Cyprinus Carpio) is > 100 mg/L

The LC₅₀ in earthworm (Eisenia foetida) is > 2000 mg/kg

Growth inhibition EC₅₀ in diatom (Navicula sp.) is 0.667 mg/L

Growth inhibition EC₅₀ in green alga (Selenastrum capricornutum) is > 100 mg/L

Acute contact LC₅₀ in honeybee (Apis mellifera) is 0.12 µg/bee

Acute oral LD₅₀ in honeybee (Apis mellifera) is 0.11 µg/bee

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

EMPTY CONTAINER: Non-returnable containers that held this material should be cleaned, prior to disposal, by triple rinsing. Containers which held this material may be cleaned by being triple-rinsed, and recycled, with the rinsate being incinerated. Do not cut or weld metal containers. Vapors that form may create an explosion hazard.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PACKAGING TYPE:	Non-Bulk
PROPER SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
TECHNICAL NAME(S):	Bifenthrin, aromatic hydrocarbons
PRIMARY HAZARD CLASS / DIVISION:	6.1

HAZARD CLASS, SUBSIDIARY:	3
UN/NA NUMBER:	UN 3351
PACKING GROUP:	III
LABEL(S):	6.1, 3
PLACARD(S):	6.1
MARKING(S):	Pyrethroid pesticide, liquid, toxic, flammable (bifenthrin, aromatic hydrocarbons), UN3351
PACKAGING TYPE:	Bulk
PROPER SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
TECHNICAL NAME(S):	Bifenthrin, aromatic hydrocarbons
PRIMARY HAZARD CLASS / DIVISION:	6.1
HAZARD CLASS, SUBSIDIARY:	3
UN/NA NUMBER:	UN 3351
PACKING GROUP:	III
MARINE POLLUTANT:	Bifenthrin
LABEL(S):	6.1, 3
PLACARD(S):	6.1
MARKING(S):	3351
REPORTABLE QUANTITY (RQ):	xylene
ADDITIONAL INFORMATION:	Xylene is in an "RQ" quantity when this material meets or exceeds 9090.9 pounds (1,149.3 gallons) per bulk package.

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PACKAGING TYPE:	Non-Bulk
PROPER SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
TECHNICAL NAME(S):	Bifenthrin, aromatic hydrocarbons
PRIMARY HAZARD CLASS / DIVISION:	6.1
HAZARD CLASS, SUBSIDIARY:	3
UN/NA NUMBER:	UN 3351
PACKING GROUP:	III
MARINE POLLUTANT:	Bifenthrin

LABEL(S):	6.1, 3
PLACARD(S):	6.1 3
MARKING(S):	Pyrethroid pesticide, liquid, toxic, flammable (bifenthrin, aromatic hydrocarbons), UN3351, Marine Pollutant
ADDITIONAL INFORMATION:	EmS Number: F-E, S-D

ADR - EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD

PACKAGING TYPE:	Non-Bulk
PROPER SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
TECHNICAL NAME(S):	Bifenthrin, aromatic hydrocarbons
PRIMARY HAZARD CLASS / DIVISION:	6.1
HAZARD CLASS, SUBSIDIARY:	3
CLASSIFICATION CODE:	TF2
UN/NA NUMBER:	UN3351
PACKING GROUP:	III
HAZARD IDENTIFICATION NUMBER:	63
MARINE POLLUTANT:	Bifenthrin
LABEL(S):	6.1, 3
PLACARD(S):	6.1 3
MARKING(S):	UN3351 + Marine Pollutant

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PACKAGING TYPE:	Non-Bulk
PROPER SHIPPING NAME:	Pyrethroid pesticide, liquid, toxic, flammable
TECHNICAL NAME(S):	Bifenthrin, aromatic hydrocarbons
PRIMARY HAZARD CLASS / DIVISION:	6.1
SUBSIDIARY RISK:	3
UN/NA NUMBER:	UN3351
PACKING GROUP:	III

LABEL(S): 6.1, 3
LIMITED QUANTITY: Y611 / 2L
LIMITED QUANTITY: PASSENGER / CARGO: 611 / 60L
LIMITED QUANTITY: CARGO: 618 / 220L
ADDITIONAL INFORMATION: Marks: Pyrethroid pesticide, liquid, toxic, flammable (bifenthrin, aromatic hydrocarbons), UN3351

OTHER INFORMATION:

HARMONIZED SYSTEM
 Import to the U.S.A.: 3808.10.2500
 Export from the U.S.A.: 3808.10.0000

15. REGULATORY INFORMATION**UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):**

Not listed

SECTION 311 HAZARD CATEGORIES (40 CFR 370):

Immediate, Delayed, Fire

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):

The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.:
 None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):

This product contains the following ingredients subject to Section 313 reporting requirements:
 1,2,4-trimethylbenzene, Bifenthrin, Xylene (mixed isomers), Cumene, Ethylbenzene

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)**CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):**

Listed

<u>Chemical Name</u>	<u>RQ</u>
Xylene	100 lb
Ethylbenzene	1,000 lb
Cumene	5,000 lb
1-butanol	5,000 lb

FEDERAL INSECTICIDE FUNGICIDE RODENTICIDE ACT
U.S. EPA Signal Word: WARNING

INTERNATIONAL LISTINGS

Australian Hazard Code: 3XE

HAZARD, RISK AND SAFETY PHRASE DESCRIPTIONS:

Bifenthrin:

EC Symbols:	T	(Toxic)
	N	(Dangerous for the environment)
EC Risk Phrases:	R25	(Toxic if swallowed.)
	R50	(Very toxic to aquatic organisms.)
	R53	(May cause long-term adverse effects in the aquatic environment.)
EC Safety Phrases:	S1/2	(Keep locked up and out of reach of children.)
	S29	(Do not empty into drains.)
	S45	(In case of accident or if you feel unwell, seek medical advice immediately - show the label where possible.)

Notes For Preparation:

CLASSIFICATION: Mandatory labeling (self-classification) of hazardous substances: applicable

Aromatic Hydrocarbons, (Index #649-356-00-4):

EC Symbols:	Xn	(Harmful)
	T	(Toxic)

EC Risk Phrases:	R10	(Flammable)
	R37	(Irritating to respiratory system.)
	R51/53	(Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)
	R65	(Harmful: may cause lung damage if swallowed.)
	R66	(Repeated exposure may cause skin dryness or cracking.)
	R67	(Vapors may cause drowsiness and dizziness.)
EC Safety Phrases:	S23	(Do not breathe gas, fumes, vapor, or spray)
	S24	(Avoid contact with skin.)
	S43A	(In case of fire use sand, earth, chemical powder or foam.)
	S57	(Use appropriate container to avoid environmental contamination.)
	S60	(This material and its container must be disposed of as hazardous waste)
	S62	(If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.)

Notes For Preparation:

Nota H applies to the product or one or more of its components. Annex 1
 Nota P of Annex 1 applies to the product or one or more of its components.

1,2,4-trimethylbenzene, (Index #601-043-00-3):

EC Symbols:	Xn	(Harmful)
	Xi	(Irritant)
	N	(Dangerous for the environment)
EC Risk Phrases:	R10	(Flammable)
	R20	(Harmful by inhalation.)
	R36/37/38	(Irritating to eyes, respiratory system and skin.)
	R51/53	(Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)
EC Safety Phrases:	S2	(Keep out of the reach of children.)
	S26	(In case of contact with eyes, rinse immediately with plenty of water and seek medical advice)
	S61	(Avoid release to the environment. Refer to special instructions/safety data sheets.)

Xylene, (Index #601-022-00-9):

EC Symbols:	Xn	(Harmful)
	Xi	(Irritant)

EC Risk Phrases: R10 (Flammable)
 R20 (Harmful by inhalation.)
 R21 (Harmful in contact with skin.)
 R38 (Irritating to skin)

EC Safety Phrases: S2 (Keep out of the reach of children.)
 S25 (Avoid contact with eyes.)

Ethylbenzene, (Index #601-023-00-4):

EC Symbols: F (Highly Flammable)
 Xn (Harmful)

EC Risk Phrases: R11 (Highly flammable)
 R20 (Harmful by inhalation.)

EC Safety Phrases: S2 (Keep out of the reach of children.)
 S16 (Keep away from sources of ignition - No Smoking.)
 S24/25 (Avoid contact with skin and eyes.)
 S29 (Do not empty into drains.)

Cumene, (Index #601-024-00-X):

EC Symbols: Xn (Harmful)
 Xi (Irritant)
 N (Dangerous for the environment)

EC Risk Phrases: R10 (Flammable)
 R37 (Irritating to respiratory system.)
 R51/53 (Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.)
 R65 (Harmful: may cause lung damage if swallowed.)

EC Safety Phrases: S2 (Keep out of the reach of children.)
 S24 (Avoid contact with skin.)
 S37 (Wear suitable gloves.)
 S61 (Avoid release to the environment. Refer to special instructions/safety data sheets.)
 S62 (If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.)

1-butanol, (Index #603-004-00-6):

EC Symbols: Xn (Harmful)
 Xi (Irritant)

EC Risk Phrases:	R10	(Flammable)
	R22	(Harmful if swallowed.)
	R37/38	(Irritating to respiratory system and to skin.)
	R41	(Risk of serious damage to eyes.)
	R67	(Vapors may cause drowsiness and dizziness.)
EC Safety Phrases:	S2	(Keep out of the reach of children.)
	S7/9	(Keep container tightly closed and in a well-ventilated place.)
	S13	(Keep away from food, drink and animal feeding stuffs.)
	S26	(In case of contact with eyes, rinse immediately with plenty of water and seek medical advice)
	S37/39	(Wear suitable gloves and eye/face protection.)
	S46	(If swallowed, seek medical advice immediately and show this container or label.)

16. OTHER INFORMATION

REVISION SUMMARY:

This MSDS replaces Revision #1, dated May 12, 2003

Changes in information are as follows:

New Format, as well as:

Section 3 (Composition / Information on Ingredients)

Section 4 (First Aid Measures)

Section 14 (Transport Information)

Section 15 (Regulatory Information)

Section 16 (Other Information)

Double Threat and FMC Logo - FMC Trademarks

Spinosad - Product of Dow AgroSciences

Viton - E.I. du Pont de Nemours & Co. Trademark

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