

MATERIAL SAFETY DATA SHEET
ZODIAC® FLEATROL CARPET & UPHOLSTERY POWDER

Manufacturer: Wellmark International
Address: 1501 E. Woodfield Rd., Suite 200-West, Schaumburg, IL 60173
Emergency Phone: 1-800-950-4783
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zodiac® Fleatrol Carpet & Upholstery Powder
Chemical Name/Synonym: Linalool: 3,7-dimethyl-1,6-octadien-3-ol; Pyrethrins: a mixture of pyrethrin I, pyrethrin II, jasmolin I, jasmolin II, cinerin I, and cinerin II; Piperonyl Butoxide: 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole ; Nylar: 2-(1-methyl-2-(4-phenoxyphenoxy)ethoxy) pyridine
Chemical Family: Terpenoid, Pyrethroid, Benzodioxole, Phenyl ether
Formula: C₁₀H₁₈O (linalool); C₂₁H₂₈O₃, C₂₂H₂₈O₅, C₂₁H₃₀O₃, C₂₂H₃₀O₅, C₂₀H₂₈O₃ and C₂₁H₂₈O₅ respectively; C₁₉H₃₀O₅; C₂₀H₁₉NO₃
EPA Registration No.: 2724-777
RF Number: RF 9813

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
Linalool	78-70-6	2.500%	
Piperonyl butoxide, Technical: Equivalent to 0.4% (Butylcarbityl)(6-propylpiperonyl) ether and 0.1% related compounds	51-03-6	0.500%	
Pyrethrins	8003-34-7	0.075%	5 mg/m3 (OSHA & ACGIH)
Nylar: 2-(1-methyl-2-(4-phenoxyphenoxy)ethoxy) pyridine	95737-68-1	0.020%	
Inert Ingredients		96.905%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
KEEP OUT OF THE REACH OF CHILDREN
CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Do not contaminate feed, water or food stuffs. Do not apply to food processing surfaces or use in food processing areas where food is exposed. Cover fish aquariums before use. Keep children and pets off treated carpet and upholstered furniture during treatment and while powder is still visible on surfaces.

SIGNS AND SYMPTOMS OF OVEREXPOSURE
May cause temporary discomfort to eyes. May cause mild skin irritation. Contains materials which may irritate the nose, throat, and respiratory tract. Systemic effects might include headache, dizziness and allergic reaction.

PRIMARY ROUTE OF ENTRY Dermal/Eye: Yes Oral: Yes Inhalation: Yes

ACUTE TOXICITY

Oral:	LD50 > 5,000 mg/kg
Dermal:	LD50 >5,000 mg/kg
Inhalation:	LC50 > 2.04 mg/L

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Slightly irritating
Eye Irritation: Minimally irritating
Sensitizer: Not a sensitizer

4. FIRST AID MEASURES

Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Do not induce vomiting or give anything by mouth to an unconscious person. Call physician immediately.

Inhalation: Remove to fresh air.

Note to Physician: N/A

5. FIRE FIGHTING MEASURES

NFPA Rating:	Health: 1	Fire: 0	Reactivity: 0
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Flammability Class: Combustible solid

Flash Point: TCC >200 degrees F

Explosive Limits (% of Volume): N/A

Extinguishing Media: CO2, foam, Halon. Do not use water. May spread fire.

Special Protective Equipment: Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire Fighting Procedures: Normal procedures. Do not allow fire fighting water to enter drainage systems or waterways.

Combustion Products: Carbon monoxide, carbon dioxide and water.

Unusual Fire/Explosion Hazards: As with all dusts, if suspended in air at high enough concentrations near an ignition source, a flash explosion may occur.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Sweep up spill, taking care not to agitate dust. Place in container which can be effectively sealed. Do not allow product to enter drainage systems or waterways.

Absorbents: If product is in liquid form, use clay granules, sawdust, dirt or equivalent.

Incompatibles: Alkalies, strong acids, oxidizers, reducing agents and strong light.

7. HANDLING AND STORAGE

Handling: Wash hands, face and arms thoroughly with soap and water after handling

product.

Storage: Store in cool, dry area, inaccessible to children.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Pyrethrins = 5 mg/m³ (OSHA PEL & ACGIH TLV)

OSHA: 6 mg/m³ (total dust) TWA

ACGIH: 10 mg/m³ (total amorphous dust) TWA. 3mg/m³ (respirable nuisance particulate) TWA.

Ventilation: Use only in a well ventilated area.

Personal Protective Equipment: If prolonged exposure is anticipated, handlers should wear a NIOSH approved pesticide respirator, impervious gloves, goggles with side shields, and other protective clothing to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Light brown powder with a citrus, floral, odor

Boiling Point: N/A

Melting Point: N/A

Vapor Pressure (mm Hg): N/A

Vapor Density (Air = 1): N/A

Specific Gravity: N/A

Bulk Density: 53 lbs/ft³

Solubility: Insoluble

Evaporation Rate: N/A

pH: N/A

10. STABILITY AND REACTIVITY

Stability: Stable

Reactivity: Non-reactive

Incompatibility w/ Other Materials: Alkalies, strong acids, oxidizers, reducing agents, and strong light

Decomposition Products: Carbon dioxide, carbon monoxide, and water.

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

PYRETHRUM: In a 2-year feeding study, rats were fed pyrethrum at dietary levels of 10, 50 and 250 mg/kg/day. The highest level had no significant effect on growth or survival. Slight though definite liver damage was observed, especially at higher dosage levels. In a 90-day feeding study, dogs that were fed pyrethrins at a dietary level of 5,000 ppm showed tremors, ataxia, labored respiration and salivation during the first month of exposure.

IPERONYL BUTOXIDE: In rats at a dietary level of 10,000 ppm of Piperonyl Butoxide, (dosage of 650 mg/kg/day), there was a moderate reduction of weight gain, increased relative weight of the kidneys and increased relative weight of the liver. A 2-year bioassay of technical Piperonyl Butoxide for possible carcinogenicity was conducted by administering dietary levels of 5,000 and 10,000 ppm to rats and mice. In the female rats, lymphomas occurred at incidences that were dose related. In the male mice, adenomas of the lacrimal gland occurred at incidences that were

dose related but were not significantly higher than that in the control group. Thus, the occurrence of this tumor in the male mice was not clearly related to the administration of Piperonyl Butoxide.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

PYRETHRUM: Rats were given pyrethrins via gavage at doses of 50, 100, and 150 mg/kg. Increased resorptions were found at the 100 and 150 mg dose levels. No significant increase in defect rate was found.

PIPERONYL BUTOXIDE: Decreased reproduction occurred in rats at dose levels of 650 mg/kg/day of Piperonyl Butoxide. There was a delay of over 23 days to the first litter, reduced average number of litters, reduced average weight of pups at 4 weeks of age, and a trend to smaller litters. In a separate study, Piperonyl Butoxide was administered to rats by gavage at 300 and 1,000 mg/kg. Piperonyl Butoxide was found not to be teratogenic at levels below maternally toxic levels.

MUTAGENICITY [Specific to Active Ingredient(s)]

Piperonyl Butoxide is not considered to be a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only]

Hydrolysis: Unknown

Photolysis: Unknown

Soil half life: Unknown

Water solubility: Insoluble

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity: fish:LC50 (fathead minnow): 7.47 mg/l (time interval of 96 hr); aquatic (general):LC50 (gammarus lacustris): 22 ug/l (time interval of 96 hr)

3. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

Container Disposal: **If empty** - Do not reuse container. Place in trash or offer for recycling if available.

If partly filled - Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

14. TRANSPORT INFORMATION

DOT49CFR Description: Consumer Commodity - ORMD

Freight Classification: Powders, Animal in Containers in Boxes.

15. REGULATORY INFORMATION

CERCLA (Superfund): Reportable Quantity (RQ) = Pyrethrins = 1 lb. Contact the National Response Center (800)244-8802 for spills exceeding the RQ.

RCRA: Not regulated as hazardous

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation)

Delayed Health: No

Fire: No

Sudden Pressure: No

Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.