



Partners with solutions

MATERIAL SAFETY DATA SHEET

OHP, INC.
P.O. BOX 230, MAINLAND, PA 19451
800-659-6745

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TRANSPORTATION EMERGENCY (24 hours a day)
CHEMTREC:(800)-424-9300

EMERGENCY (24 hours a day) AND PRODUCT INFORMATION
OHP, Inc.:(800)-356-4647

Shuttle™ O

EPA Registration Number: 66330-38-59807

I. PRODUCT IDENTIFICATION

PRODUCT NAME: SHUTTLE™ O

PRODUCT USE: MITICIDE

II. COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	CAS #	Exposure Limits*	% Weight	% Volume
Acequinocyl (3-Dodecyl-1,4-dihydro-1,4-dioxo-2-naphthylacetate)	57960-19-7	TWA ^a OSHA PEL ^b : None ACGIH TLV ^c : None NIOSH REL ^d : None	15.8	NA

Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

*Source: Guide to Occupational Exposure Values 2000, published by ACGIH

^aTWA: Time-weighted average exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

^bOSHA PEL: Occupational Safety and Health Administration Permissible Exposure Limits.

^cACGIH TLV: American Conference of Governmental Industrial Hygienists, Inc., Threshold Limit Values.

^dNIOSH REL: National Institute for Occupational Safety and Health Recommended Exposure Limits.

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION:

- HARMFUL IF INHALED
- MAY CAUSE SLIGHT EYE IRRITATION
- PROLONGED EXPOSURE MAY CAUSE SKIN SENSITIZATION
- KEEP OUT OF REACH OF CHILDREN

Acute Health Hazards

Inhalation: May be harmful if inhaled. Avoid breathing dust. Remove and wash contaminated clothing before reuse.

Eyes: May cause slight eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

Skin: May cause slight skin irritation. Avoid contact with skin and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Ingestion: Not expected to be an ingestion hazard under normal handling operations.

Chronic Health Hazards

(Including Cancer): No evidence of carcinogenicity from animal studies. Effects to the liver, kidney, and hematology system have been observed following chronic exposure in laboratory animals.

Reproductive and

Developmental Toxicity ..: No evidence of reproductive or developmental toxicity.

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IV. FIRST AID MEASURES

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Eyes: 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 eye. Call a poison control center or doctor for treatment advice.

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

Ingestion: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

V. FIRE FIGHTING MEASURES

Flammable Limits

in Air (% by volume): Upper: NDA
Lower: NDA

Flash Point: NDA

Method Used: NDA

Autoignition Temperature: NDA

LEL/UEL: NDA

NFPA Hazard Classification:

Health: 1

Flammability: NDA

Reactivity: NDA

Other: NDA

Extinguishing Media: Foam, dry powder, CO₂ extinguisher, or water mist

Special Fire

Fighting Procedures: Avoid inhaling or contact with the substance, any combustion products, or resulting gases. Wear full protective clothing and mask.

Hazardous Combustion

Products: NDA

VI. ACCIDENTAL RELEASE MEASURES

EMERGENCY PHONE NUMBERS

Exposure Calls (OHP, Inc.) : 1-800-356-4647

Spill Calls (CHEMTREC) : 1-800-424-9300

Isolate and post spill area. Wear prescribed protective cloth-

ing and equipment. Keep out unprotected persons and animals. Large spills should be covered to prevent dispersal. Vacuum or shovel wastes into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution and add the solution to the drums of wastes already collected. Spillage or uncontrolled discharges into water-courses must be alerted to the appropriate regulatory body. Remove contaminated water for removal or treatment.

VII. HANDLING AND STORAGE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read entire label. Use strictly in accordance with label precautionary statements and directions. Store in well ventilated place. Keep container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. Keep out of reach of children.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Do not get this material in your eyes. The use of chemical safety eyewear is recommended when handling this material.

Respiratory/Ventilation

Requirements: Make sure that adequate ventilation is available to avoid breathing the spray mist. If needed, use a MSHA/NIOSH approved respirator for pesticides to eliminate inhaling the material.

Skin Protection: Avoid skin contact by wearing appropriate protective clothing, gloves and eye/face protection. Remove contaminated clothing and wash before re-wearing.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellowish

Odor: Slightly aromatic odor

Physical State: Viscous suspension

pH: 6.5-7.0 (20% in water)

Boiling Point: NDA

Melting Point: NA

Freezing Point: NA

Vapor Pressure: NDA

Vapor Density: NDA

Specific Gravity: 1.02-1.05 (20°C)

Evaporation Rate: NDA

Solubility in Water: NDA

Percent Solids by Weight: NDA

Percent Volatile: NDA

Volatile Organic Compounds (VOC): NDA

Molecular Weight: NDA

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Viscosity: NDA

X. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions

Hazardous Polymerization: Will not occur

Flash Point: NDA

Flammable Point: NDA

Auto Ignition: NDA

Incompatibility With

Other Materials: Excessive heat and fire, oxidizers and acids

Hazardous

Decomposition Products: None identified

XI. TOXICOLOGICAL INFORMATION

Acute:

Eye Irritation: This product produced slight eye irritation in rabbits (irritation cleared within 48 hours following exposure).

Skin Irritation: This product was not irritating to the skin of rabbits following 4-hr exposure.

Dermal Toxicity: The dermal LD50 of this product is > 2,000 mg/kg in male and female rats.

Oral Toxicity: The oral LD50 of this product in rats and mice is > 5,000 mg/kg (male/female).

Inhalation Toxicity: The inhalation LC50 (4-hr) of this product is > 4.56 mg/L in rats (male/female).

Skin Sensitization: The test material has been shown to be negative in the modified Buehler test, and mild sensitization in the Magnusson/Kligman maximization test.

Subchronic Toxicity: (based upon testing of the active ingredient) Following 13-week dietary exposure to mice (NOEL < 100 ppm), rats (NOEL ≥ 400 ppm), or dogs (NOEL < 40 ppm), at least one of the following adverse effects were observed: decreased body weight, decreased food consumption, hematological disturbance, death, anorexia, urine discoloration, altered activity, diarrhea, fecal discoloration, liver effects, heart effects, kidney lesions, hemorrhage.

Chronic/Carcinogenicity: (based upon testing of the active ingredient) Not carcinogenic in rats, mice, or dogs. In general, the clinical signs and adverse effects that occurred in the subchronic tests were also observed during chronic testing.

Teratology/Developmental

Toxicity: (based upon testing of the active ingredient) Not teratogenic in rabbits or rats. Only at maternally toxic doses was fetotoxicity observed in rabbits (≥ 60 mg/kg/d) and rats

(≥ 500 mg/kg/d).

Reproduction: (based upon testing of the active ingredient) Not a reproductive toxicant in rat 2-generation study (NOEL > 1,500 ppm).

Mutagenicity: (based upon testing of the active ingredient) Negative for bacterial reverse mutation, chromosomal aberration in CHO cells, and mouse micronucleus tests.

XII. ECOLOGICAL INFORMATION

Avian Toxicity (based upon technical material):

Bobwhite quail (*C. virginianus*)

Oral LD50 > 2,000 mg a.i./kg b.w.

Aquatic Organism Toxicity:

Rainbow trout (*O. mykiss*)

96 hr LC50 = 65 mg a.i./L

Water flea (*D. magna*)

46 hr EC50 = 2.3 mcg a.i./L

Other Non-Target Organism Toxicity:

Earthworm (*E. foetida*)

14 d LC50 > mg a.i./kg soil

Honeybee (*A. mellifera* L.)

72 hr contact LD50 > 350 mcg /bee

Honeybee (*A. mellifera* L.)

72 hr oral LD50 > 315 mcg /bee

XIII. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national regulations. An acceptable method of disposal is to burn in an incinerator. Do not cut or weld metal containers. Vapors that form inside may create an explosion hazard.

XIV. TRANSPORT INFORMATION

D.O.T. Shipping Name: Not regulated

Technical Shipping Name: NA

Packing Group: NA

D.O.T. Hazard Class: NA

U.N./N.A. Number: NA

Product RQ (lbs): NA

D.O.T. Label: NA

D.O.T. Placard: NA

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Marine Pollutant: Yes
IMO:
Shipping Name: Environmentally hazardous
substance liquid, N.O.S.
IMO label: 9
IMO Placard: 9

XV. REGULATORY INFORMATION

U.S. Federal Regulations FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act):

All pesticides are governed under FIFRA. Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

CERCLA (Comprehensive Response Compensation, and Liability Act):

None.

OSHA (Occupational Safety and Health Administration):

NA

SARA Title III (SUPERFUND Amendments and Reauthorization Act):

Section 302 (EHS) TPQ . . . : NONE

Section 304 (EHS) RQ . . . : NONE

Section 311/312 CATEGORIES

1. Immediate (Acute) Health Effects; YES
2. Delayed (Chronic) Health Effect; YES
3. Fire Hazard; NDA
4. Sudden Release of Pressure Hazard; NDA
5. Reactivity Hazard; NDA

TSCA (Toxic

Substance Control Act) . . . : This product is exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

State Regulations: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

XVI. OTHER INFORMATION

Prepared by: Ashley R. Brown

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The information in this MSDS is based on data available to us as of the issue date given herein, and believed to be correct.

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Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

Shuttle is a trademark of Arysta LifeScience North America Corporation.

