



MetaLarv[®] S-PT
MSDS# BIO-0532 Rev. 9

ISSUED 04/10/13

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: MetaLarv[®] S-PT,
MetaLarv[®] S-PT Mosquito Growth Regulator,
MetaLarv[®] S-PT Mosquito Growth Regulator Pellet,
S-methoprene Pellet
EPA Reg No.: 73049-475
Code Number: 53725
List Number: 05765

MANUFACTURER: Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:
Outside the United States: 651-632-6184
Within the United States: 877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS

NOT COMPLETELY TESTED - USE APPROPRIATE CAUTION

INGREDIENT NAME: S-Methoprene
CONCENTRATION: 4.25%
CAS NUMBERS: 65733-16-6

INGREDIENT NAME: Additives - Trade secret
CONCENTRATION: 95.75%
CAS NUMBERS: Trade Secret

OSHA-PEL 8HR TWA: 10 mg/m³ (total dust); 3 mg/m³ (respirable fraction)
ACGIH-TLV 8HR TWA: 0.025 mg/m³ (respirable fraction), for a minor component

3. HAZARDS INFORMATION

CAUTION: KEEP OUT OF REACH OF CHILDREN

EMERGENCY OVERVIEW: Take precautions in case of skin contact, eye contact, or inhalation. This product contains an ingredient which contains a small amount of naturally-occurring crystalline silica as quartz. Prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis). The process by which this pellet is manufactured produces an

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essentially dust-free pellet. Exposure to silica dust from the finished product will not be expected to occur. The finished product is not considered carcinogenic, because application and exposure data indicate that exposure to respirable quartz, from the normal use of the ingredient in this product which contains crystalline silica, is well below the OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV); adverse effects would not be expected from normal use of this product.

ROUTE(S) OF ENTRY: Eye: Yes
 Skin: Yes
 Inhalation: Yes
 Ingestion: No

 INGESTION RATING: None
SKIN ABSORPTION RATING: N/D
 INHALATION RATING: Inhalation of excessive concentrations of dust may cause irritation of mucous membranes and upper respiratory tract.
CORROSIVENESS RATING: Not corrosive.
 SKIN CONTACT RATING: N/D
SKIN SENSITIZATION RATING: N/D
 EYE CONTACT RATING: N/D
 TARGET ORGANS: Eyes, lungs

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L ACGIH: N/L
Inhalation of excessive concentrations of any dust, including this material, may lead to lung injury. As formulated, this product is not expected to form appreciable respirable crystalline silica dust from use or attrition. Because application and exposure data indicate exposure to respirable quartz in the normal use of the ingredient within this product which contains crystalline silica, is well below the OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV). Adverse effects would not be expected from normal use of this product

SIGNS AND SYMPTOMS: Symptoms may include, coughing, nausea depending on mode of exposure. Direct contact with the eyes or skin may result in irritation, particularly to sensitive individuals. Inhalation may result in respiratory irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D. Pre-existing eye, lung or skin problem may be aggravated. Potential allergic reaction in sensitive individuals.

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4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Take off contaminated clothing. Remove from source of exposure. Flush with copious amounts of water. Cover irritated skin with an emollient. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Do NOT induce vomiting. Give large quantities of water. Remove from source of exposure. Move person to fresh air. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. If person is not breathing, call 911, then give artificial respiration.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: 143°C for active ingredient

FLASH POINT METHOD: N/D

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: 263°C for active ingredient

FIRE & EXPLOSION HAZARDS: Active ingredient is flammable in presence of open flames and sparks. Formulated product is not expected to be flammable.

EXTINGUISHING MEDIA: DRY chemical, water spray, foam or carbon dioxide.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Ventilate area. Remove all sources of ignition. Wear appropriate personal protective equipment. Recover product with inert material (earth, sand, vermiculite), place into appropriate container for disposal. Do not flush to sewer.

PRECAUTION: Prevent for reaching surface waters or other water supplies.



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7. HANDLING AND STORAGE

HANDLING: Ventilate. Wash hands after handling the product. Do not eat drink or smoke while working with product, obey reasonable safety precautions and practice good housekeeping. For filling operations respiratory protection may be recommended particularly in enclosed areas.

STORAGE: Protect against physical damage. Close containers of unused material. Store in a dry, cool, ventilated place. Keep away from source of ignition. Store separately from reactive or combustible materials and out of direct sunlight.

SPECIAL PRECAUTIONS: Wear gloves made of Latex or other impervious materials. Use dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C) or a NIOSG approved respirator with any N, P, R or HE filter). Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

SKIN PROTECTION: Impervious protective clothing, including boots and gloves. For filling operations if dust/mist is produced respiratory protection is recommended.

EYE PROTECTION: Goggles, safety glasses with side shields or full-face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Solid Pellet

ODOR: N/D

BOILING POINT: N/D

MELTING/FREEZING POINT: N/D

VAPOR PRESSURE: N/D

VAPOR DENSITY (Air=1): N/D

EVAPORATION RATE: N/D

DENSITY: N/D

SPECIFIC GRAVITY: N/D

SOLUBILITY: N/D

pH: N/D

VISCOSITY: N/D

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10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under ordinary conditions of use and storage.
Stable at 54°C when exposed to metals and metal ions
Hydrolytically stable at pH 4, 7 and 9.
Not stable in Light, Spontaneous reaction Not possible.

INCOMPATIBILITIES: None

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION (For the active ingredient)
-----ORAL TOXICITY: LD₅₀ >5,050 mg/kg (rat)DERMAL TOXICITY: LD₅₀ >5,050 mg/kg (rabbit)INHALATION TOXICITY: LC₅₀ >2.38 mg/L air

CORROSIVENESS: Not corrosive.

DERMAL IRRITATION: slightly-irritating, (Irr. Index 0.3, category IV)

OCULAR IRRITATION: minimally-irritating, (Irr. Index 6.7, category IV)

DERMAL SENSITIZATION: not a sensitizer (guinea pig)

SPECIAL TARGET ORGAN EFFECTS: Respirable irritation.

CARCINOGENICITY INFORMATION: A component of one of the ingredients is naturally-occurring crystalline silica as quartz, which is listed as a human carcinogen. Other Components of this product are not listed as carcinogenic by NTP, IARC or OSHA. Care should be taken due to respirable potential for irritation and silicosis as a result of excessive inhalation exposure to crystalline silica.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY

This material is not a teratogenic compound. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

12. ECOLOGICAL INFORMATION (for active ingredient)
-----Hydrolysis: T_{1/2} > 4 weeksPhotolysis: T_{1/2} < 10 hours

Soil Half-Life: ~10 days

Water Solubility: < 2 ppm

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ECOLOGICAL INFORMATION: LC₅₀ 4.26 mg/L 96-H (zebrafish)
EC₅₀ 0.48 mg/L (24-H), 0.38 mg/L (48H) (Daphnia)
EC₅₀ 2.26 mg.L (72-H)Alga (Selenastrum)

Persistence: Active ingredient readily degraded, 10-Hours (photolysis),
biodegradable.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of product in accordance with federal,
state, and local regulations. Prevent contamination of environment by
wastes.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated as Hazardous by DOT

PROPER SHIPPING NAME: (Isopropyl (2E,4E)-(7S)-11-methoxy-3,7,11-
trimethyldodeca-2,4-dienoate)

FREIGHT CLASSIFICATION: Insecticide, N.O.S. other than poison in boxes or
drums

15. REGULATORY INFORMATION

TSCA STATUS: N/L

CERCLA STATUS: Not regulated as hazardous

SARA STATUS: Acute: No Chronic: Yes Fire: No CDT: No

RCRA STATUS: Not regulated as hazardous

State Right-To-Know: Respirable dusts of crystalline silica are
classified as a Delayed (Chronic) Health Hazard. As
formulated, MetaLarv[®] is not expected to form appreciable
respirable dust from use or attrition.

Consult applicable national, state provincial or local laws to determine
regulations, laws or ordinances which may be applicable.

OSHA HAZARD COMMUNICATION STANDARD: Respirable crystalline silica is a
"Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,
29 CFR 1910.1200

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16. OTHER INFORMATION

REASON FOR ISSUE: Correct code number and add list number.
APPROVAL DATE: 04/10/13
SUPERSEDES DATE: 08/14/12

LEGEND: N/A = Not Applicable
N/D = Not Determined
N/L = Not Listed
L = Listed
C = Ceiling
S = Short-term
(R) = Registered Trademark of Valent BioSciences
(TM) = Registered Trademark of Valent BioSciences

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