1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product Identifier
MATERIAL NAME: Metalarv S-PT Mosquito Growth Regulator Spherical Pellet
Synonyms: VBC-60215, Metalarv S-PT, Metalarv XRP Mosquito Growth Regulator Extended Release Pouch
EPA Reg No.: 73049-475
Code Number: 53725
List Number: 05765
Substance Registration Number(s)[REACH]: N/A

1.2 Relevant Identified Uses and Uses Advised Against
Identified Uses: Mosquito growth regulator
Uses Advised Against: It is a violation of Federal law to use this product in a manner inconsistent with its FIFRA pesticide labeling.

1.3 Details of the supplier of the Safety Data Sheet
Supplied By: Valent BioSciences LLC
1910 Innovation Way, Suite 100
Libertyville, Illinois  60048

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

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture
Acute Aquatic Toxicity – Cat 1 (Daphnia/S-Methoprene).

2.2 Labeling Elements
Symbol(s)

Signal Word
WARNING
Hazard Statement(s)
Harmful to aquatic life (Daphnia)

2.3 Precautionary Statement:
Prevention
Avoid release to the environment

Response
Collect spillage

Disposal
Dispose of contents/container in accordance with local/regional/national regulations.

2.4 Other Hazards
None identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>65733-16-6</td>
<td>S-Methoprene</td>
<td>4.25</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Other ingredients</td>
<td>95.75</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

GENERAL: In all cases of doubt, seek medical attention.

EYES: Remove from source of exposure. Flush with copious amounts of water. Remove contact lenses, if present and easy to do, 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: Remove from source of exposure. Take off contaminated clothing. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. Move person to fresh air. Do NOT induce vomiting. 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, and then give artificial respiration.

4.2 Most important Symptoms and Effects, both Acute and Delayed

Acute
No information on significant adverse effects

Delayed
No information on significant adverse effects

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed
Treat symptomatically and supportively

5. FIRE FIGHTING PROCEDURES

5.1 Extinguisher Media

Suitable Extinguisher Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguisher Media
None known

5.2 Specific Hazards Arising from the Chemical

Thermal decomposition products
Carbon oxides

5.3 Advice to Firefighters

Protective Equipment and precautions for firefighters
Firefighter should wear full-face, self-contained breathing apparatus and protective clothing. Firefighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)

Fire & Explosive hazard
Not expected to be flammable.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with skin or inhalation of spillage or vapor. Ensure adequate ventilation. Evacuate personnel to safe areas. Wash face and hands thoroughly after handling.

6.2 Environmental Precautions
Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and
sewers.

6.3 Methods and Materials for Containment and Cleaning Up
Wear appropriate personal protective equipment. Sweep up material and place in appropriate container for disposal. Do not flush to sewer.

6.4 Reference to Other Sections
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations. See Section 13 for Disposal Considerations.

US Regulations may require reporting spills of hazardous materials: See Section 15: REGULATORY INFORMATION for details on reportable quantities, if any.

7. HANDLING AND STORAGE

7.1 Precautions for Safe handling
Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Do not eat, drink or smoke while working with product, obey reasonable safety precautions and practice good housekeeping.

7.2 Conditions for Safe Storage, Including Incompatibilities
Store in a cool, dry place

Incompatibilities
None Known

7.3 Specific End Use(s)
Mosquito growth regulator

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters
Component Exposure Limits
None
Derived No Effect Levels (DNELs)
No DNELs available
Predicted No Effect Concentrations (PNECs)
No PNECs available

8.2 Exposure Controls
Appropriate Engineering Controls
Provide general ventilation. Where adequate general ventilation is unavailable use process enclosure, local exhaust ventilation, or other engineering control.
SKIN PROTECTION:
Wear protective clothing, including boots and gloves. For filling operations if dust/mist is produced respiratory protection is recommended. Wear gloves. Wash thoroughly with soap and water after handling.

EYE PROTECTION:
Wear goggles, safety glasses with side shields or full-face shield when splashing or spraying of materials is likely.

RESPIRATORY PROTECTION:
Use dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C) or a NIOSH approved respirator with any N, P, R or HE filter). Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Rust &amp; light grey-brown Solid Pellet</td>
</tr>
<tr>
<td>pH</td>
<td>9.5 (1% w/v)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Octanol/H₂O Coeff.</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Determined</td>
</tr>
<tr>
<td>VOC</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor of mold</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Solubility (H₂O)</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>0.72 g/ml</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Decomposition Temp.</td>
<td>Not Determined</td>
</tr>
<tr>
<td>LFL</td>
<td>Not Determined</td>
</tr>
<tr>
<td>UFL</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability Class</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

10. CHEMICAL STABILITY AND REACTIVITY

10.1 Reactivity
Material does not pose a significant reactivity hazard.

10.2 Chemical Stability
Stable under ordinary conditions of use and storage. Spontaneous reaction not possible.

10.3 Possibility of Hazardous Reactions
Does not undergo hazardous polymerization

10.4 Conditions to Avoid
None known
10.5 Incompatible Materials
None known

10.6 Hazardous Decomposition Products
Carbon oxides and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

ACUTE EFFECTS  Product Toxicology Studies
  ORAL TOXICITY: LD_{50} > 5,000 mg/kg (rat)
  DERMAL TOXICITY: LD_{50} > 5,000 mg/kg (rabbit)
  INHALATION TOXICITY: LC_{50} > 5.09 mg/L
  CORROSIVENESS: Not corrosive.
  DERMAL IRRITATION: Not irritating, (Category IV)
  OCULAR IRRITATION: Minimally irritating, (Category IV)
  DERMAL SENSITIZATION: Not a sensitizer (guinea pig)
  MUTAGENICITY INFORMATION: Components of this product are not listed as mutagens.
  CARCINOGENICITY INFORMATION: Components of this product are not listed as carcinogenic by NTP, IARC or OSHA.
  DEVELOPMENTAL/REPRODUCTIVE TOXICITY: This material is not pathogenic

SPECIAL TARGET ORGAN EFFECTS: None
ASPIRATION HAZARD: Not Applicable
REPEAT DOSE STUDIES: Not Applicable, Pathogenicity Toxicity testing was all negative

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity (Data for a Concentrated S-Methoprene Technical Powder)
  Fish:  LC_{50} > 4.26 mg/L (96-H, Zebra Fish); NOEC: 1.25 mg/L
  Algae: EC_{50} > 2.264 mg/L (48-H)
  Invertebrates: EC_{50} > 0.22 mg/L (48-H) (Daphnia)

12.2 Persistence and Degradability
No data available

12.3 Bioaccumulation potential
No data available

12.4 Mobility in Soil
No data available
12.5 Results of PBT and vPvB assessment
Assessments not performed

12.6 Other adverse effects
None known

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Methods
Dispose of product in accordance with federal, state, provincial, and local regulations. Prevent contamination of environment by wastes.

US EPA WASTE NUMBER & DESCRIPTIONS: There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic or listed hazardous waste.

14. TRANSPORTATION INFORMATION

DOT
STATUS: Not regulated for domestic ground transport by US DOT
UN PROPER SHIPPING NAME: N/A
REMARKS: N/A

IATA/ICAO
STATUS: Regulated
PROPER SHIPPING NAME: UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (S-Methoprene), 9, III, Marine Pollutant
REMARKS: Single or inner packaging less 5 kg net (solids) exempted from Dangerous Goods regulations – see IATA Special Provision A197

IMDG
STATUS: Regulated
PROPER SHIPPING NAME: UN3077 Environmentally Hazardous Substance, Solid, N.O.S. (S-Methoprene), 9, III, Marine Pollutant
REMARKS: Single or inner packaging less 5 kg net (solids) exempted from Dangerous Goods regulations – see IMDG 2.10.2.7

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations / Specific Legislation

TSCA STATUS: Exempt
CERCLA STATUS: Not regulated as hazardous
SARA STATUS: Acute: No Chronic: No Fire: No CDT: No
RCRA STATUS: Not regulated as hazardous
State Right-To-Know: Not Listed
Consult applicable national, state provincial or local laws to determine regulations, laws or ordinances which may be applicable.

OSHA HAZARD COMMUNICATION STANDARD: Not defined by the OSHA Hazard Communication Standard, 29 CFR

15.2 EPA Pesticide Regulations

EPA Registration Number 73049-475
EPA Pesticide Label signal word: CAUTION

Product must have EPA Approved Pesticide Label attached to or accompanying all containers.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions and limitations for its use.

KEEP OUT OF REACH OF CHILDREN
CAUTION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION
Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Environmental Hazards
Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. Do not contaminate water when disposing of equipment washwaters.

PESTICIDE STORAGE: Store any unused product in original container. Ensure that container is tightly closed then store in a cool, dry place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Hazard Ratings</th>
<th>HMIS Hazard Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 0</td>
<td>Health: 0</td>
</tr>
<tr>
<td>Flammability: 0</td>
<td>Flammability: 0</td>
</tr>
<tr>
<td>Instability: 0</td>
<td>Instability: 0</td>
</tr>
</tbody>
</table>

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Extreme

REASON FOR ISSUE: General Update and add new brand name
APPROVAL DATE: 03/05/2020
SUPERSEDES DATE: 01/17/2020

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 LLC
(TM) = Registered Trademark of Valent BioSciences LLC
responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent BioSciences LLC to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, “Hazcom”). The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.