## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

# Product Name: ProLink Pellets Mosquito Growth Regulator

**Other Names:** (S)-Methoprene.
**Use:** Mosquito Growth Regulator.
**Company:** Pacific BioLogics.
**Address:** 35 Beach Street, Kippa Ring, QLD, 4020.
**Telephone Number:** 07 3283 5077 **Fax Number:** 07 3283 5088
**Emergency Telephone Number:** 07 3283 5077 (8.30 am to 5.30pm EST Mon to Fri).

## SECTION 2 HAZARDS IDENTIFICATION

**Not classified as hazardous according to criteria of NOHSC.**
**Not classified as a Dangerous Good according to the ADG Code.**

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:**

| *CHEMICAL* | *CAS NUMBER* | *PROPORTION (% w/w)* |
|---|---|---|
| (S)-Methoprene | 65733-16-6 | 4% w/w |
| Other ingredients determined to be non hazardous | | balance |

## SECTION 4 FIRST AID MEASURES

**FIRST AID**

**Ingestion:** If poisoning occurs, contact a doctor or Poisons Information Centre Phone Australia 131126. Give 1-2 glasses of water.
**Eye contact:** Flush eyes gently with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.
**Skin contact:** Wash skin with soap and water.
**Inhalation:** Remove to fresh air.

**Advice to Doctor:** Treatment should be symptomatic and supportive care.

## SECTION 5 FIRE FIGHTING MEASURES

This product is not flammable.
**Extinguishing media:** Use water spray, foam, $CO_2$ or dry chemical. Contain all runoff.
**Hazards from combustion products:** When exposed to high temperatures, toxic fumes may be emitted.
**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Emergency procedures:** Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Vacuum or shovel spilled material into an approved container and if unable to use as directed on the label, dispose of as directed in section 13.

## SECTION 6 | ACCIDENTAL RELEASE MEASURES (Continued)

**Material and methods for containment and cleanup procedures:** To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. Keep out unprotected persons and animals.

## SECTION 7 | HANDLING AND STORAGE

**Precautions for safe Handling:** Ensure containers are kept intact until using product. When using product wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length PVC gloves. If dust is present wear face shield or goggles and disposable dust mask. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.
**Conditions for safe Storage:** Store in the closed, original container in a well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food and feed stuffs.

## SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION

**National Exposure Standards:**
No exposure standard has been established by NOHSC Australia. However a general standard of 10 mg/m³ (TWA) is applicable for dusts. This dust concentration is unlikely to be encountered when using this product.

**Biological Limit Values:**
No biological limits have been established for this product.
**Engineering controls:**
Use in ventilated area only. Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading.

**Personal Protective equipment (PPE):**
Work Clothing: Wear long-sleeved uniform of coveralls and chemical resistant gloves.

Eye Protection: If dust is present, wear chemical protective goggles or face shield.

Respiratory Protection: For dust exposure, wear a disposable dust mask.

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

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

## SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance:** | Grey to black solid pellets with slight hydrocarbon odour. |
| **Boiling point:** | Solid - not applicable. |
| **Freezing point:** | Solid - not applicable. |
| **Bulk Density:** | 1.04 g/mL. |
| **Solubility in Water:** | 1 ppm. |
| **pH:** | Not applicable. |
| **Flammability:** | Not flammable. |
| **Corrosive hazard:** | Non corrosive. |
| **Flashpoint (°C) :** | Not applicable - solid. |
| **Poisons Schedule:** | Not a scheduled poison. |

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.
**Conditions to avoid:** No particular conditions to avoid.
**Incompatible materials:** No particular materials to avoid.
**Hazardous decomposition products:** When the product is heated to high temperatures, the active constituent will decompose and emit toxic fumes.
**Hazardous reactions:** No particular reactions to avoid.

## SECTION 11 TOXICOLOGICAL INFORMATION

***Potential Health Effects:***

**Swallowed:** This product has low toxic if swallowed. Acute Oral $LD_{50}$ (rat) > 34,000 mg/kg (calculated from S-Methoprene).

**Eye Contact:** Not irritating to eyes (Based on data on S-Methoprene).

**Skin Contact:** This product has low toxicity by the dermal route. Acute Dermal $LD_{50}$ (rabbit) > 2000 mg/kg.

**Inhaled:** The active ingredient in this product has low toxicity if inhaled.

**Chronic:** No data available on this formulation. In studies with laboratory animals, S-Methoprene Technical did not cause teratogenicity, reproductive toxicity or carcinogenicity.

## SECTION 12 ECOLOGICAL INFORMATION

**Environmental Properties:** No data is available on this product. Toxicity data is on the active constituent, (S)-Methoprene, has a half-life in soil of approximately 10 days which varies with soil type. The hydrolysis half-life > 4 weeks. Photolysis half-life is < 10 hours. Water solubility is < 2 mg/L.
**Environmental Toxicology:** With fish $LC_{50}$ values of > 370 mg/L to 760 mg/L, (S)-methoprene is considered moderately toxic to fish. [Note: Acute fish toxicity would not be expected during control programmes as the concentration of methoprene in water at any one time is unlikely to exceed 0.002 mg/L.] (S)-methoprene has low toxicity to birds and is practically non-toxic to adult bees, but bee larvae are sensitive.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal:** Dispose of waste in accordance with the requirements of Local or State Waste Management Authorities or according to Australian Standard 2507 - Storage & Handling of Pesticides. Wear protective clothing such as full body cover barrier suit, eg. a rubber rain suit. Keep out unprotected persons and animals.

**Disposal of empty containers:** Break, crush, puncture and bury empty containers in a local authority landfill. If not available bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

## SECTION 14 TRANSPORT INFORMATION

**Storage & Transport:** This product is not classified as a Dangerous Good.
Store in the closed, original container in a well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seeds and fertilisers.

## SECTION 15 REGULATORY INFORMATION

Not classified as a hazardous substance according to criteria of NOHSC Australia.
Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP), this product is a not a scheduled poison.
This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 58064.
Product is not classified as a Dangerous Good according to the ADG Code (6th Ed).

## SECTION 16 OTHER INFORMATION

Issue Date: 10 May 2006 (First issue).
Key to abbreviations and acronyms used in this MSDS:

| | |
|---|---|
| ADG Code | Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail). |
| Carcinogen | An agent which is responsible for the formation of a cancer. |
| Genotoxic | Capable of causing damage to genetic material, such as DNA. |
| NOHSC | National Occupational Health and Safety Commission. |
| PPE | Personal protective equipment. |
| Teratogen | An agent capable of causing abnormalities in a developing foetus. |
| TWA | The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life. |

References

1. "Search Hazardous Substances". Dept. of Employment and Workplace Relations. Office of the Australian Safety and Compensation Council website. (2006).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

*End of MSDS.*