SAFETY DATA SHEETS

This SDS packet was issued with item:

078377527

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078393095 078393806 078394384 078705022 078915049

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078399889 078911792

Material Safety Data Sheet PERMECTRINTM CDS POUR-ON INSECTICIDE

Version: Revision 1 Date Issued: 08/13/11 MSDS No. 6148370

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY: KMG- Bernuth, Inc.

9555 W Sam Houston Pkwy S., Suite 600

Houston, Texas 77099-2145

PHONE NUMBER: 800-322-8177

EMERGENCY PHONE: CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: PERMECTRINTM Pour-On Insecticide
ALTERNATE NAME: Buzz-Off Pour-On Insecticide
PRODUCT USE: Ready-To-Use Livestock Insecticide

PEREMECTRIN is a Trademark of KMG-Bernuth, Inc.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

IDENTITY CAS NUMBER TYPICAL % OTHER INFORMATION

Permethrin 52645-53-1 7.4 % Piperonyl Butoxide 51-03-6 7.4 %

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

SECTION 3: HAZARDS IDENTIFICATION

PHYSICAL HAZARDS: Do not use or store near heat or open flame.

HEALTH HAZARDS: CAUTION. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before eating or smoking.

SECTION 4: FIRST AID MEASURES

IF SWALLOWED: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person

IF ON SKIN: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice.

IF IN 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.

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

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-322-8177 for emergency medical treatment. NOTE TO PHYSICIAN: Contains petroleum distillate – vomiting may cause aspiration pneumonia.

SECTION 5: FIREFIGHTING MEASURES

FLASH POINT: > 93° C (> 200° F>

AUTOIGNITION TEMPERATURE: Not applicable **FLAMMABLE LIMITS (STP):** Not applicable

EXTINGUISHING MEDIA: For small fire, use dry chemical, carbon dioxide, water spray or foam. For large fire, use water spray, fog or foam. Do not use water jet. Contain run-off to prevent contamination of surface waters.

PROTECTIVE EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

HMIS RATING: Health 1 Fire 1 Reactivity 0 PPE B

NFPA RATING: Health 1 Fire 1 Reactivity 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak: Wear long-sleeved shirt and long pants, rubber boots over shoes and socks, chemical resistant waterproof gloves, protective chemical safety goggles and a NIOSH-approved pesticide organic vapor respirator or air-supplied respirator. Sweep up spilled material and place in an approved chemical container. Use non-sparking tools and remove ignition sources.

Wash the spill area with a solution of water and household bleach (1:2), absorb on absorbent material, sweep up and place in a disposal container. Wash area with detergent and absorb liquid and sweep up and place into container. Seal the container and handle in an approved manner.

Flush the area with water to remove any residue. Contain any washwaters. Do not allow washwaters to contaminate surface waters and do not flush to sewer systems.

For disposal, refer to Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep container sealed when not in use. Open as needed. Protect from freezing. Do not reuse or refill this container.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAUTION. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before eating or smoking.

SECTION 8: EXPOSURE CONTOLS/PERSONAL PROTECTION - CONTINUED

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Not required by the US EPA. Manufacturer recommendations are:

Mixers, loaders, applicators and other handlers supporting spray applications wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves
- Protective eyewear

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

OCCUPATIONAL EXPOSURE LIMITS:

AEL Recommended Not available ACGIH TLV Not available OSHA PEL Not available

OCCUPATIONAL EXPOSURE STANDARDS: Not established

VENTILATION: Provide exhaust ventilation or other engineering controls to keep exposure to airborne contaminants below the exposure limit.

EYE PROTECTION: See PERSONAL PROTECTIVE EQUIPMENT (PPE) above.

BODY PROTECTION: See PERSONAL PROTECTIVE EQUIPMENT (PPE) above.

RESPIRATORY PROTECTION: None required but recommend MSHA-NIOSH approved respirator for organic vapors.

OTHER PROTECTIVE EQUIPMENT: Eyewash station and safety shower in work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

FORMULATION: Ready-to-use Liquid

PHYSICAL STATE: Liquid Light Yellow **COLOR: ODOR:** Oil-like odor **BOILING POINT:** Not available **MELTING POINT:** Not applicable FREEZING TEMPERATURE: Not applicable Not available **VAPOR PRESSURE: VAPOR DENSITY:** Not available **EVAPORATION RATE:** Not available

SPECIFIC GRAVITY: 0.863
BULK DENSITY: 7.20 lb/gal
SOLUBILITY IN OIL: Miscible
pH VALUE: Not available
VISCOSITY: Not available
% VOLATILES: Not Available

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat and sunlight

MATERIALS TO AVOID: Strong acids

HAZARDOUS DECOMPOSITION

PRODUCTS: Oxides of carbon. Incomplete combustion may lead to formation

of carbon monoxides and/or other asphyxiates.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL LD₅₀ (**RAT**): 3800 mg/kg (Permethrin Active Ingredient)

7500 mg/kg (Piperonyl Butoxide Technical)

ACUTE DERMAL LD₅₀ (RAT): 7950 mg/kg (Piperonyl Butoxide Technical)

ACUTE INHALATION (RAT – 4 HR LC₅₀): Not available PRIMARY EYE IRRITATION (RABBIT): Mild irritant PRIMARY DERMAL IRRITATION (RABBIT): Not available DERMAL SENSITIZATION: Not a sensitizer.

EFFECTS OF OVEREXPOSURE:

Acute overexposure may result in mild irritation to eyes and skin. If swallowed, may cause vomiting and/or diarrhea.

Chronic overexposure: At high exposure levels, the active ingredient in this product has been reported to cause reversible skin numbness or tingling, skin irritation, and sensitivity, central nervous system depression, respiratory irritation, dizziness, intoxication and narcosis. No known carcinogenic, mutagenic, teratogenic, or developmental toxicity effects.

SECTION 12: ECOLOGICAL INFORMATION

This pesticide is extremely toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Apply this product only as specified on its label. Do not contaminate water by cleaning of equipment or disposal of wastes.

SECTION 13: DISPOSAL CONSIDERATIONS

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

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available.

SECTION 14: TRANSPORT INFORMATION

Follow the precautions indicated in the Handling and Storage Section, Section 7 of this MSDS

DOT PROPER SHIPPING NAME: Not regulated.

FREIGHT DESCRIPTION: Agricultural Insecticide, Liquid, N.O.S.

IATA/CAO CLASSIFICATION: Not available

IMO CLASSIFICATION: Not available

SECTION 15: REGULATORY INFORMATION

UNITED STATES EPA: EPA Reg. No. 61483-70

EPA Signal Word - CAUTION

OTHER: SARA 312 HAZARD CLASS: Not applicable

SARA 313 TOXIC CHEMICALS: Permethrin (CAS# 52645-53-1)

Piperonyl Butoxide (CAS# 51-03-6)

REPORTABLE QUANTITY: Not applicable RCRA HAZARDOUS WASTE: Not listed

CALIFORNIA PROPOSITION 65: No warnings required

SECTION 16: OTHER INFORMATION

Reason for MSDS Revision: Convert to 16 section format and update information

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, KMG-Bernuth, Inc. (Company) makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

MSDS No.: 6148370

Revision No.: 1 Supersedes: Original Date: August 13, 2011 Approved by: H. R. O'Neal



SAFETY DATA SHEET

PERMECTRIN™ CDS POUR-ON INSECTICIDE

Version 1.2 Revision Date 02/15/2013

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product Name: PERMECTRINTM CDS POUR-ON INSECTICIDE

MSDS Number: 122000008510

Company

BAYER HEALTHCARE LLC Animal Health Division 12707 Shawnee Mission Parkway (West 63rd) Shawnee, KS 66216-1846 USA (800) 633-3796

In case of emergency: (800) 422-9874

Chemtrec: (800) 424-9300

BAYER INFORMATION PHONE: (800) 633-3796

INTERNATIONAL: (703) 527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING! Combustible Liquid Colour: Light yellow to yellow **Form:** liquid **Odour:** oily. Harmful if absorbed through skin.

Hazard Communication (29CFR 1910.1200)

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

3. COMPOSITION/INFORMATION ON INGREDIENTS

Weight percent	Components	CAS-No.
7.4%	Permethrin	52645-53-1

7.4% Piperonyl butoxide 51-03-6

Version 1.2 Revision Date 02/15/2013

4. FIRST AID MEASURES

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. Call a physician immediately.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Contact Number: Use the Bayer Emergency Number in Section 1

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Fire may cause evolution of: Carbon monoxide Carbon dioxide (CO2)

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Cover spilt product with liquid-binding material (sand, silica gel, acid binder, universal binder, hybilat). Take up mechanically and fill into labelled, closable containers.

Additional advice: Keep away from/remove sources of ignition.

Further Accidental Release Notes

Keep away from/remove sources of ignition.

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7. HANDLING AND STORAGE

Handling:

Avoid formation of aerosol. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Permethrin (52645-53-1)

Respiratory protection:

Recommended Filter type: Organic vapor with prefilter

Hand protection:

Chemically resistant gloves.

Eye protection:

Safety glasses

Other protective measures:

Wear suitable protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour: Light yellow to yellow

Odour: oily

Density: 0.863 g/cm³ at 68 °F (20 °C) no data available

Flash point: $> 200 \, ^{\circ}\text{F} \, (> 93.33 \, ^{\circ}\text{C})$

10. STABILITY AND REACTIVITY

Conditions to avoid: no data available

Materials to avoid: Oxidizing agents

Hazardous reactions: None known.

Thermal decomposition:

no data available

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Hazardous decomposition products:

Carbon monoxide, Carbon dioxide (CO2)

Oxidizing properties:

No statements available.

Impact Sensitivity:

no data available

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity:

LD50 rat : > 5,050 mg/kg

Acute inhalation toxicity:

LC50 rat: > 2.76 mg/l, 4 h

Acute dermal toxicity:

LD50 rabbit: > 2,020 mg/kg

Skin irritation:

rabbit

Result: Mild skin irritation

Eye irritation:

rabbit

Result: No eye irritation

Sensitisation:

guinea pig

Result: Does not cause skin sensitization.

Pharmaceutic effects:

Permethrin Insecticide

12. ECOLOGICAL INFORMATION

General advice:

Do not allow to enter surface waters or groundwater.

Toxicity to fish:

Permethrin

LC50 0.0076 mg/l

Test species: Poecilia reticulata Duration of test: 48 h

PERMECTRIN™ CDS POUR-ON INSECTICIDE

Version 1.2

Revision Date 02/15/2013

Toxicity to daphnia and other aquatic invertebrates:

Permethrin EC50 37 µg/l

Test species: Daphnia magna (Water flea) Duration of test: 48 h

Method: OECD Test Guideline 202

EC50 0.00017 mg/l

Test species: Daphnia magna (Water flea) Duration of test: 48 h

Toxicity to algae:

Permethrin EC50 0.5 mg/l Duration of test: 72 h

Biodegradability:

Permethrin

0 %, 28 d Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION

Land transport (CFR)

Non-Regulated

Sea transport (IMDG)

Non-Regulated

Air transport (ICAO / IATA cargo aircraft only)

Non-Regulated

Air transport (ICAO / IATA passenger and cargo aircraft)

Non-Regulated

15. REGULATORY INFORMATION

Other regulations: No statements available.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components

Version 1.2 Revision Date 02/15/2013

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components

Permethrin

Heterocyclic compound

US. EPA CERCLA Hazardous Substances (40 CFR 302)Components

None

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

Weight percent Components CAS-No. 5 - 10% Permethrin 52645-53-1

5 - 10% Heterocyclic compound

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous **Substances Lists**

Weight percent Components CAS-No. 5 - 10% Permethrin 52645-53-1

5 - 10% Heterocyclic compound

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

OSHA Hazcom Standard Rating Hazardous

16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.