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

Product information
Product Name: Buzz-Off Spray-On
MSDS Number: 122000010321

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
Harmful if absorbed through skin.

Colour: Light yellow to yellow  Form: liquid  Odour: oily.

GHS Classification:
Skin sensitization : Category 1
Carcinogenicity : Category 1B

GHS Label element:
Hazard pictograms :

Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
                   H350 May cause cancer.

Precautionary statements : Prevention:
P201 Obtain special instructions before use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4%</td>
<td>Permethrin</td>
<td>52645-53-1</td>
</tr>
<tr>
<td>7.4%</td>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
</tr>
</tbody>
</table>

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.

Most important symptoms and effects, both acute and delayed: No information available.

Notes to physician: No information available.

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 (CO) 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: No special precautions required.

Further Accidental Release Notes: No special precautions required.

7. HANDLING AND STORAGE

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

No special protective measures against fire required.

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

Form: No applicable information is available
Colour: Light yellow to yellow
Odour: oily
Odour Threshold: No applicable information is available
Melting point: No applicable information is available
Boiling point/boiling range: No applicable information is available
Density: 0.863 g/cm³ at 68 °F (20 °C)
Bulk density: No applicable information is available
Viscosity, dynamic: No applicable information is available
Viscosity, kinematic: No applicable information is available
Flow time: No applicable information is available
Surface tension: No applicable information is available
Miscibility with water: No applicable information is available
Water solubility: No applicable information is available
pH: No applicable information is available
Relative density: No applicable information is available
Partition coefficient: No applicable information is available
Solubility(ies): No applicable information is available
Flash point: > 200 °F (> 93.33 °C)
Flammability (solid, gas): No applicable information is available
Ignition temperature: No applicable information is available
Explosion limits: No applicable information is available

10. STABILITY AND REACTIVITY

Conditions to avoid: no data available

Materials to avoid: Oxidizing agents

Hazardous reactions: None known.

Thermal decomposition:
Hazardous decomposition products:
Carbon monoxide (CO), Carbon dioxide (CO2)

Oxidizing properties:
No statements available.

Impact Sensitivity:
no data available

11. TOXICOLOGICAL INFORMATION

Other information on toxicity:
Permethrin
Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

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

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

STOT - single exposure:
no data available
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

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 rapidly 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

US Sea transport (IMDG)
Non-Regulated

US Air transport (ICAO / IATA cargo aircraft only)
SAFETY DATA SHEET
Buzz-Off Spray-On
Version 1.0 Revision Date 06/26/2013

Non-Regulated

US Air transport (ICAO / IATA passenger and cargo aircraft)
Non-Regulated

International IATA
UN Number 3082
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PERMETHRIN)
Class 9
Packaging group III
Dangerous goods labels 9
Environmentally hazardous yes

International IMDG
UN Number 3082
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PERMETHRIN)
Class 9
Packaging group III
IMDG-Labels 9
EmS Number F-A
Marine Pollutant yes

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
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

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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.