

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 1 of 11

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

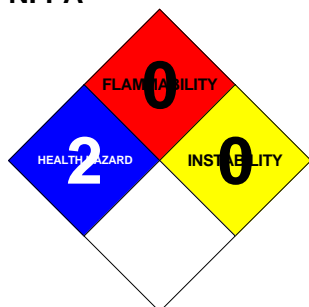
### PRODUCT NAME

CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

### STATEMENT OF HAZARDOUS NATURE

**CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.**

### NFPA



### SUPPLIER

Company: Callington Haven Pty Ltd

Address:

30 South Street

Rydalmere

NSW, 2116

Australia

Telephone: +61 2 9898 2788

Emergency Tel: **1800 039 008 (24 hours)**

Emergency Tel: **+61 3 9573 3112**

Fax: +61 2 9684 4215

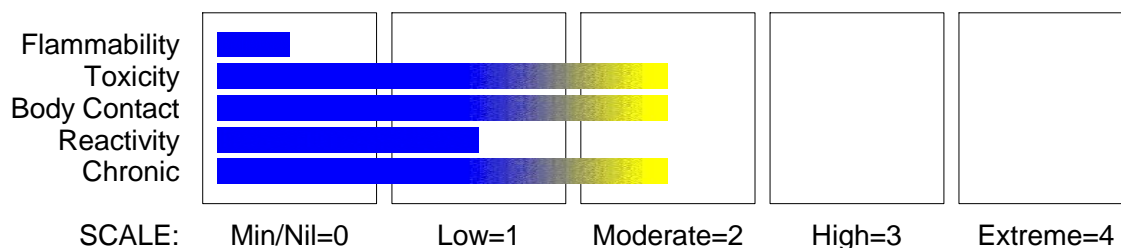
Email: sales@calhaven.com.au

### PRODUCT USE

- Application is by spray atomization from a hand held aerosol pack. Used to kill crawling and flying insects in aircraft cargo holds.

## Section 2 - HAZARDS IDENTIFICATION

### HAZARD RATINGS



### EMERGENCY OVERVIEW

#### RISK

May cause SENSITIZATION by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 2 of 11

## Section 2 - HAZARDS IDENTIFICATION

Risk of explosion if heated under confinement.

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

- Overexposure is unlikely in this form.
- Considered an unlikely route of entry in commercial/industrial environments.

##### EYE

- Not considered to be a risk because of the extreme volatility of the gas.

##### SKIN

- Spray mist may produce discomfort.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

##### INHALED

- There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
- The vapor is discomforting.
- WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.
- Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. Vapor is heavier than air and may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.
- Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death. Significant concentrations of the non-toxic gas reduce the oxygen level in the air. As the amount of oxygen is reduced from 21 to 14 volume %, the pulse rate accelerates and the rate and volume of breathing increase. The ability to maintain attention and think clearly is diminished and muscular coordination is somewhat disturbed. As oxygen decreases from 14-10% judgement becomes faulty; severe injuries may cause no pain. Muscular exertion leads to rapid fatigue. Further reduction to 6% may produce nausea and vomiting and the ability to move may be lost. Permanent brain damage may result even after resuscitation at exposures to this lower oxygen level. Below 6% breathing is in gasps and convulsions may occur. Inhalation of a mixture containing no oxygen may result in unconsciousness from the first breath and death will follow in a few minutes.
- Spray mist may produce discomfort.
- Acute effects from inhalation of high vapor concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.

#### CHRONIC HEALTH EFFECTS

- Skin contact with the material is more likely to cause a sensitization reaction in some persons compared to the general population.
  - There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.
- There is some evidence that inhaling this product is more likely to cause a sensitization reaction in some persons compared to the general population.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
phenothrin, as		
sumithrin	26002-80-2	<10
permethrin	52645-53-1	<10

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

## Chemwatch Material Safety Data Sheet

Jul-2-2011  
B293LP(cs)

CHEMWATCH 62764  
Version No:6.1.1.1  
CD 2013/2 Page 3 of 11

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

propellant, as HFC

>60

NOTE: Manufacturer has supplied full ingredient information to allow CHEMWATCH assessment.

### Section 4 - FIRST AID MEASURES

#### SWALLOWED

- Not considered a normal route of entry.

#### SKIN

- If solids or aerosol mists are deposited upon the skin:
  - Flush skin and hair with running water (and soap if available).
  - Remove any adhering solids with industrial skin cleansing cream.
  - DO NOT use solvents.
  - Seek medical attention in the event of irritation.

#### NOTES TO PHYSICIAN

- Treat symptomatically.

For chronic or short term repeated exposures to pyrethrum and synthetic pyrethroids: Mammalian toxicity of pyrethrum and synthetic pyrethroids is low, in part because of poor bioavailability and a large first pass extraction by the liver. The most common adverse reaction results from the potent sensitizing effects of pyrethrins. Clinical manifestations of exposure include contact dermatitis (erythema, vesiculation, bullae); anaphylactoid reactions (pallor, tachycardia, diaphoresis) and asthma [Ellenhorn Barceloux] In cases of skin contact, it has been reported that topical application of Vitamin E Acetate (alpha-tocopherol acetate) has been found to have high therapeutic value, eliminating almost all skin pain associated with exposure to synthetic pyrethroids. [Incitec].

### Section 5 - FIRE FIGHTING MEASURES

Vapour Pressure (mmHg): 1875.154

Upper Explosive Limit (%): Not Applicable

Specific Gravity (water=1): Not Available

Lower Explosive Limit (%): Not Applicable

#### EXTINGUISHING MEDIA

- SMALL FIRE:

- Water spray, dry chemical or CO2

LARGE FIRE:

- Water spray or fog.

#### FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapor fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 328 feet in all directions.

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 4 of 11

Section 5 - FIRE FIGHTING MEASURES

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## GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Non combustible.
- Not considered to be a significant fire risk.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- Aerosol cans may explode on exposure to naked flames.
- Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects.
- May emit acrid, poisonous or corrosive fumes.
- Decomposes on heating and may emit toxic fumes of carbon monoxide (CO).

## FIRE INCOMPATIBILITY

- Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.
- 

## Section 6 - ACCIDENTAL RELEASE MEASURES

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### MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing vapors and contact with skin and eyes.
- Wear protective clothing, impervious gloves and safety glasses.
- Shut off all possible sources of ignition and increase ventilation.
- Wipe up.
- If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated.
- Undamaged cans should be gathered and stowed safely.

### MAJOR SPILLS

- Clear area of personnel and move upwind.
  - Alert Emergency Responders and tell them location and nature of hazard.
  - May be violently or explosively reactive.
  - Wear breathing apparatus plus protective gloves.
  - Prevent, by any means available, spillage from entering drains or water course.
  - No smoking, naked lights or ignition sources.
  - Increase ventilation.
  - Stop leak if safe to do so.
  - Water spray or fog may be used to disperse / absorb vapor.
  - Absorb or cover spill with sand, earth, inert materials or vermiculite.
  - If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated.
  - Undamaged cans should be gathered and stowed safely.
  - Collect residues and seal in labeled drums for disposal.
  - Remove leaking cylinders to a safe place if possible.
  - Release pressure under safe, controlled conditions by opening the valve.
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## Section 7 - HANDLING AND STORAGE

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### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area. Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights or ignition sources.
- Avoid contact with incompatible materials.

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 5 of 11

Section 7 - HANDLING AND STORAGE

- When handling, DO NOT eat, drink or smoke.
- DO NOT incinerate or puncture aerosol cans.
- DO NOT spray directly on humans, exposed food or food utensils.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

## RECOMMENDED STORAGE METHODS

- Aerosol dispenser.
- Check that containers are clearly labeled.

## STORAGE REQUIREMENTS

- Keep Dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE CONTROLS

The following materials had no OELs on our records

- sumithrin: CAS:26002- 80- 2
- permethrin: CAS:52645- 53- 1 CAS:54774- 45- 7 CAS:57608- 04- 5 CAS:93388- 66- 0  
CAS:63364- 00- 1 CAS:60018- 94- 2 CAS:75497- 64- 2

### MATERIAL DATA

CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD:

PERMETHRIN:

SUMITHRIN:

- No exposure limits set by NOHSC or ACGIH.

### PERSONAL PROTECTION



### EYE

- No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures:
  - Safety glasses with side shields.
  - NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 6 of 11

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### HANDS/FEET

■ NOTE: The material may produce skin sensitization in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. No special equipment needed when handling small quantities.

OTHERWISE:

For potentially moderate exposures:

Wear general protective gloves, eg. light weight rubber gloves.

For potentially heavy exposures:

Wear chemical protective gloves, eg. PVC. and safety footwear.

### OTHER

■ No special equipment needed when handling small quantities.

OTHERWISE:

• Overalls.

• Skin cleansing cream.

• Eyewash unit.

DO NOT spray on hot surfaces.

### RESPIRATOR

•Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### PHYSICAL PROPERTIES

Liquid.

Gas.

Does not mix with water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°F)	Not Available	Viscosity	Not Available
Boiling Range (°F)	Not Available	Solubility in water (g/L)	Immiscible
Flash Point (°F)	Non flammable	pH (1% solution)	Not Applicable
Decomposition Temp (°F)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°F)	Not Available	Vapour Pressure (mmHg)	1875.154
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	Not Available
Lower Explosive Limit (%)	Not Applicable	Relative Vapor Density (air=1)	>1
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

Material	Value
PERMETHRIN:	
log Kow	3.48- 6.5

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 7 of 11

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Clear colourless liquid; does not mix with water.

Supplied in aerosol pack containing non-flammable HFC propellant.

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Elevated temperatures.
- Presence of open flame.
- Product is considered stable.
- Hazardous polymerization will not occur.

### STORAGE INCOMPATIBILITY

- Avoid reaction with oxidizing agents.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

## Section 11 - TOXICOLOGICAL INFORMATION

### Callington 1 Shot Aerosol Insecticide for Cargo Hold

#### TOXICITY AND IRRITATION

##### PERMETHRIN:

CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD:

■ Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's edema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitization potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitizing substance which is widely distributed can be a more important allergen than one with stronger sensitizing potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.

##### SUMITHRIN:

###### TOXICITY

Oral (rat) LD50:>10000 mg/kg

[OHS]

###### IRRITATION

Nil Reported

Skin (rat) LD50:>10000 mg/kg

##### PERMETHRIN:

###### TOXICITY

Oral (rat) LD50:383 mg/kg

Inhalation (rat) LC50:485 mg/m<sup>3</sup>

Dermal (rat) LD50:1750 mg/kg

Dermal (mouse) LD50:>10000 mg/kg

Oral (rabbit) LD50:4000 mg/kg

Dermal (rabbit) LD50:>2000 mg/kg

Oral (g.pig) LD50:4000 mg/kg

Oral (rat) LD50:6000 mg/kg \*

###### IRRITATION

Skin (rabbit):500 mg/24h - Mild

■ The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 8 of 11

## Section 11 - TOXICOLOGICAL INFORMATION

redness, swelling, the production of vesicles, scaling and thickening of the skin.

Oral (rat) LD50: 430-4000 mg/kg \*

Oral (mouse) LD50: 540-2960 mg/kg \*

cis/trans ratio: 40:60

cis/trans ratio: 20:80

ADI: 0.05 mg/kg for nominal cis-trans 40:60 and 25:75 isomers only

### CARCINOGEN

sumithrin	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	2A	Probably carcinogenic to humans
permethrin	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	2A	Probably carcinogenic to humans
permethrin	International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs	Group	3	Not classifiable as to its carcinogenicity to humans
permethrin	US Environmental Defense Scorecard Suspected Carcinogens	Reference(s)	OPP- CAN	

## Section 12 - ECOLOGICAL INFORMATION

PERMETHRIN:

SUMITHRIN:

■ DO NOT discharge into sewer or waterways.

■ Synthetic pyrethroids are examples of optimized insecticidal activity, selectivity and tailored environmental persistence. Through modifications of both acid and alcohol portions of the ester, compounds of desired residual activity have been synthesized whilst maintaining a biodegradable ester linkage. These compounds are generally very toxic to crustaceans and fish in laboratory bioassays. Under field conditions, however the residues are tightly bound in sediment, and ingested residues are readily metabolized. Their toxicity in natural systems are generally less than laboratory test data might indicate. They are generally non-persistent in the environment.

■ Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SUMITHRIN:

Marine Pollutant

Yes

Ecotoxicity data:

Invertebrate Toxicity: LD?: 0.01mg/L/7Weeks (development) (Mosquito Wyeomyia smithii)

Fate and transport:

Bioconcentration: 480microgram/L/14Days BCF (Residue) (Carp Cyprinus carpio) S.D.(?) 0.86 microgram/L

PERMETHRIN:

Marine Pollutant

Yes

log Kow: 3.48-6.5

continued...



# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

## Chemwatch Material Safety Data Sheet

Jul-2-2011  
B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 9 of 11

### Section 12 - ECOLOGICAL INFORMATION

Half-life (hr) soil: 288-648

BCF: 30-2480\*

\* Muir et al. 1994 Aquatic Toxicology 29(3/4)223-240

Toxicity Class WHO: II (Ambush); III (Outflank)

In soil and water degradation rapid:

DT50 in soil <38 days (pH 4.2-7.7 o.m. 1.3-51.3%)

Oral (chicken) LD50: 7000 mg/kg

Oral (quail) LD50: 13500 mg/kg

Oral (duck) LD50: 11300 mg/kg

#### Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
sumithrin	HIGH	No Data Available	LOW	LOW
permethrin	HIGH	No Data Available	HIGH	LOW

### Section 13 - DISPOSAL CONSIDERATIONS

#### Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

! DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Consult Waste Management Authority for disposal.
- Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- DO NOT incinerate or puncture aerosol cans.
- Bury residues and emptied aerosol cans at an approved site.

### Section 14 - TRANSPORTATION INFORMATION



#### DOT:

Symbols:	None	Hazard class or Division:	2.2
Identification Numbers:	UN1950	PG:	None
Label Codes:	2.2, 6.1	Special provisions:	None
Packaging: Exceptions:	306	Packaging: Non- bulk:	None
Packaging: Exceptions:	306	Quantity limitations:	Forbidden
		Passenger aircraft/rail:	
Quantity Limitations:	Forbidden	Vessel stowage:	A
Cargo aircraft only:		Location:	
Name:			
Aerosols,poison, Packing Group III (each not exceeding 1 L capacity)			

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

## Chemwatch Material Safety Data Sheet

Jul-2-2011  
B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 10 of 11

### Section 14 - TRANSPORTATION INFORMATION

#### Air Transport IATA:

ICAO/IATA Class	2.2	ICAO/IATA Subrisk:	None
UN/ID Number:	1950	Packing Group:	-
Special provisions:	A145		

Shipping name:AEROSOLS

#### Maritime Transport IMDG:

IMDG Class	2.2	IMDG Subrisk:	SP63
UN Number:	1950	Packing Group:	None
EMS Number:	F- D, S- U	Special provisions:	63 190 277 327 344 959
Limited Quantities:	See SP277	Marine Pollutant:	Yes

Shipping name:AEROSOLS

### Section 15 - REGULATORY INFORMATION

#### REGULATIONS

##### US EPCRA Section 313 Chemical List

Ingredient	CAS	% de minimus concentration
sumithrin	26002- 80- 2	1.0
permethrin	52645- 53- 1	1.0

##### US CERCLA List of Hazardous Substances and Reportable Quantities

Ingredient	CAS	RQ
sumithrin	26002- 80- 2	

#### Callington 1 Shot Aerosol Insecticide for Cargo Hold (CAS: ) is found on the following regulatory lists;

"Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (French)", "US - Delaware Pollutant Discharge Requirements - Reportable Quantities", "US - Massachusetts Toxics Use Reduction Act (TURA) listed chemicals", "US - New York List of Hazardous Substances", "US CWA (Clean Water Act) - List of Hazardous Substances", "US FDA CFSAN Food Additives Status List", "US FDA List of ""Indirect"" Additives Used in Food Contact Substances", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act"

#### Regulations for ingredients

##### sumithrin (CAS: 26002-80-2) is found on the following regulatory lists;

"Canada - British Columbia Occupational Exposure Limits", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (French)", "Canada National Pollutant Release Inventory (NPRI)", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Fragrance Association (IFRA) Survey: Transparency List", "Sigma-Aldrich Transport Information", "US - California - 22 CCR - Hazardous Waste Codes - Appendix XII", "US - Delaware Pollutant Discharge Requirements - Reportable Quantities", "US - Massachusetts Toxics Use Reduction Act (TURA) listed chemicals", "US - New Jersey Environmental Hazardous Substances List", "US - New Jersey Right to Know Hazardous Substances (English)", "US - New York List of Hazardous Substances", "US American Cleaning Institute Cleaning Product Ingredient Inventory", "US CWA (Clean Water Act) - List of Hazardous Substances", "US EPCRA Section 313 Chemical List", "US FDA CFSAN Food Additives Status List", "US FDA Indirect Food Additives: Adhesives and Components of Coatings - Substances for Use Only as Components of Adhesives - Pressure-sensitive adhesives", "US FDA List of ""Indirect"" Additives Used in Food Contact Substances", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number"

##### permethrin (CAS: 52645-53-1,54774-45-7,57608-04-5,93388-66-0,63364-00-1,60018-94-2,75497-64-2) is found on the following regulatory lists;

"Canada - British Columbia Occupational Exposure Limits", "Canada - Ontario Occupational Exposure Limits", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (English)", "Canada CEPA Environmental Registry Substance Lists - List of substances on the DSL that are Inherently Toxic to the Environment (French)", "Canada List of Prohibited and Restricted Cosmetic Ingredients (The Cosmetic Ingredient ""Hotlist""), "Canada National Pollutant Release Inventory (NPRI)", "Canada Substances in Products Regulated Under the Food and Drugs Act (F&DA) That Were In Commerce between January 1, 1987 and September 13, 2001 (English)", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Fragrance Association (IFRA) Survey: Transparency List", "Sigma-Aldrich Transport Information", "US - Arizona Water Quality Standards for Surface Waters", "US - California - 22 CCR - Hazardous Waste Codes - Appendix XII", "US - California Permissible Exposure Limits for Chemical Contaminants", "US - Delaware Pollutant Discharge Requirements - Reportable Quantities", "US - Massachusetts - Right To Know Listed Chemicals", "US - Massachusetts Toxics Use Reduction Act (TURA) listed chemicals", "US - New Jersey Environmental Hazardous Substances List", "US - New Jersey Right to Know Hazardous Substances (English)", "US - New York List of Hazardous Substances", "US American Cleaning Institute Cleaning Product Ingredient Inventory", "US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)", "US CWA (Clean Water Act) - List of Hazardous Substances", "US EPA Integrated Risk Information System (IRIS)", "US EPCRA Section 313 Chemical List", "US FDA CFSAN Food Additives Status List", "US FDA Indirect Food

continued...

# CALLINGTON 1 SHOT AEROSOL INSECTICIDE FOR CARGO HOLD

## Chemwatch Material Safety Data Sheet

Jul-2-2011

B293LP(cs)

CHEMWATCH 62764

Version No:6.1.1.1

CD 2013/2 Page 11 of 11

## Section 15 - REGULATORY INFORMATION

Additives: Adhesives and Components of Coatings - Substances for Use Only as Components of Adhesives - Pressure-sensitive adhesives", "US FDA List of "Indirect" Additives Used in Food Contact Substances", "US List of Lists - Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112(r) of the Clean Air Act", "US Postal Service (USPS) Numerical Listing of Proper Shipping Names by Identification (ID) Number", "WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established"

## Section 16 - OTHER INFORMATION

### Denmark Advisory list for selfclassification of dangerous substances

Substance	CAS	Suggested codes
sumithrin	26002- 80- 2	Mut3; R68 N; R50/53

### INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
permethrin	52645- 53- 1, 54774- 45- 7, 57608- 04- 5, 93388- 66- 0, 63364- 00- 1, 60018- 94- 2, 75497- 64- 2

■ Classification of the mixture and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: [www.chemwatch.net/references](http://www.chemwatch.net/references).

■ For detailed advice on Personal Protective Equipment, refer to the following U.S. Regulations and Standards:  
OSHA Standards - 29 CFR:  
1910.132 - Personal Protective Equipment - General requirements  
1910.133 - Eye and face protection  
1910.134 - Respiratory Protection  
1910.136 - Occupational foot protection  
1910.138 - Hand Protection  
Eye and face protection - ANSI Z87.1  
Foot protection - ANSI Z41  
Respirators must be NIOSH approved.

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