1. IDENTIFICATION

Product name: BUMPER 418 EC (PCP Reg. No. 28017)

Chemical name of active ingredient(s): Propiconazole: 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-

2-yl]Methyl]-1H-1,2,4-triazole

Registrant: ADAMA Agricultural Solutions Canada Ltd.

300 – 191 Lombard Avenue Winnipeg, Manitoba R3B 0X1 Phone: 1-855-264-6262

For fire, spill, and/or leak emergencies, contact

Infotrac:

For medical emergencies and health and

safety inquiries, contact ProPharma:

Phone: 1-877-250-9291

Phone: 1-800-535-5053

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACIGH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Propiconazole	60207-90-1	41.8	NA	NA	NA	NA
Aromatic solvent containing:	64742-94-5	33.2	NA	NA	NA	NA
			50 mg/m ³	52 mg/m ³		IARC-2B**
Naphthalene	91-20-3	3.3*	(TWA)	(TWA)	NA	NTP-2***
			125 mg/m ³	123 mg/m ³		
1,2,4-Trimethylbenzene	95-63-6	0.56*	(TWA)	(TWA)	NA	NA

NA=Not applicable

3. HAZARDS IDENTIFICATION

PHYSICAL PROPERTIES:

Appearance: Clear-brownish liquid

Odor: Aromatic

EMERGENCY OVERVIEW: WARNING. Eye and skin irritant. Potential skin sensitizer. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist or vapors. Harmful or fatal if swallowed, inhaled or absorbed through the skin. Causes eye and skin irritation. This product may cause skin-sensitization reactions in certain individuals.

HAZARDOUS THERMAL (DE)COMPOSITION PRODUCTS: NOx, CO, CO2 and chlorides.

PRIMARY ROUTES OF EXPOSURE: Eye and skin contact.

SYMPTOMS OF ACUTE EXPOSURE: Skin redness and tears.

4. FIRST AID

FIRST AID:

Contains petroleum distillates at greater than 10%.

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

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 centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

^{*}Percentage of total amount.

^{**}IARC-2B: The agent is possibly carcinogenic to humans. The exposure circumstance entails exposures that are possibly carcinogenic to humans.

^{***}NTP-2: Substance, which may reasonably be anticipated to be a carcinogen.

MATERIAL SAFETY DATA SHEET BUMPER 418 EC

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

Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION:

There is no specific antidote for this product. Apply symptomatic therapy. This product contains PETROLEUM DISTILLATES. Vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

FLASH POINT: 144° F (62°C)

EXTINGUISHING MEDIA: Water spray, fog or regular foam.

SPECIAL FIRE-FIGHTING PROCEDURES: Fight fire from a protected location. Dike fire control water for later disposal.

HAZARDOUS THERMAL (DE)COMPOSITION PRODUCTS: NOx, CO, CO2 and chlorides.

PROTECTION OF FIRE FIGHTERS: Wear suitable protective clothing. Self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Dispose of this material and its container at hazardous or special waste collection point, in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out. In the event of minor spillage: Absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Handle and open container in a manner as to prevent spillage. Do not get on skin or in eyes. Do not eat, drink or smoke during work; wash hands and face thoroughly before doing so. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes.

PRECAUTIONS TO BE TAKEN IN STORAGE: To prevent contamination, store this product away from food or feed

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Wear protective goggles or face shield when handling the concentrated product.

SKIN PROTECTION: Long-sleeved shirt, socks, chemical-resistant footwear and overalls when mixing, handling the product and during equipment cleanup and repairs.

HAND PROTECTION: Neoprene gloves.

RESPIRATOR REQUIREMENTS: In areas with inadequate ventilation a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

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ADDITIONAL PROTECTIVE MEASURES: After work, change clothing and wash entire body thoroughly. Wash contaminated working clothes separate from other laundry before reuse. Do not contaminate food or feed.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2. **ENGINEERING CONTROLS:** Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear-brownish liquid

ODOR: Aromatic

FLASH POINT: 144° F (62°C)

pH: 6-8

DENSITY: 1.075 g/mL **VISCOSITY:** 45 cps

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Protect from sunlight, open flame and sources of heat. Decomposes upon heating.

MATERIALS TO AVOID: Avoid contact with: strong acids and strong bases. **HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: NOx, CO, CO2 and chlorides.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD50 (Rat): 972 mg/kg (female); >2,000 mg/kg (male)

Acute Dermal LD50 (Rat): >5,000 mg/kg
Acute Inhalation LC50 (Rat): >2.04 mg/L (4-hr)
Eye Irritation (Rabbit): Moderately irritating.
Dermal Sensitization (Guinea Pig): A skin sensitizer.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: TOXIC to aquatic organisms. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall,

moderate to steep slope, bare soil, poorly draining soil (e.g., soils that are compacted or fine textured such as clay). Avoid application of this product when heavy rain is in the forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

13. DISPOSAL CONSIDERATIONS:

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and provincial requirements.

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14. TRANSPORT INFORMATION:

CANADIAN TDG CLASSIFICATION:

Not regulated for land shipments.

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Novaluron), 9, PGIII, Marine

Pollutant

IATA (air): UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Novaluron), 9, PGIII, Marine

Pollutant

15. REGULATORY INFORMATION:

CANADIAN REGULATIONS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.

DOMESTIC SUBSTANCES LIST:

Naphthalene

1,2,4-Trimethylbenzene

INGREDIENT DISCLOSURE LIST:

Naphthalene

1,2,4-Trimethylbenzene

U.S. FEDERAL REGULATIONS:

CERCLA RQ: Naphthalene RQ=100 lbs (Product= 3030 lbs/338 gals)

RCRA: 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.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Delayed health hazard (chronic)

Section 313: Propiconazole CAS #: 60207-90-1 (41.8%)

Naphthalene CAS #: 91-20-3 (3.3%)

1,2,4-Trimethylbenzene CAS #: 95-63-6 (0.56%)

CA PRPO 65: This material contains a substance (naphthalene) known to the State of California to cause cancer. **RCRA CLASSIFICATION:** 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.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION:

MSDS DATE:. 9-1-2017. Supersedes versions dated 1-18-16, 6-5-15, 6-7-12, 4-9-09 and 3-8-06. Changes made to Sections 1.

The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied, is made. Consult ADAMA Agricultural Solutions Canada Ltd.. for further information.