

## Material Safety Data Sheet

DOW AGROSCIENCES CANADA INC.

#### Product name: LORSBAN™ 50W Insecticide

Issue Date: 12/04/2014

DOW AGROSCIENCES CANADA INC. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name: LORSBAN™ 50W Insecticide

# Recommended use of the chemical and restrictions on use Identified uses: End use insecticide product

#### COMPANY IDENTIFICATION

DOW AGROSCIENCES CANADA INC. 2100 450 1<sup>ST</sup> STREET SW CALGARY AB T2P 5H1 CANADA

For MSDS Updates and Product Information: 800-667-3852 Prepared by: Prepared for use in Canada by EH&S, Hazard Communications. Revision Date: 12/04/2014

**Customer Information Number:** 

800-667-3852 solutions@dow.com

#### EMERGENCY TELEPHONE NUMBER 24-Hour Emergency Contact: 613-996-6666 Local Emergency Contact: 613-996-6666

## 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

#### Appearance

Physical state Powder

Color Gray

Odor

Obnoxious

Hazard Summary	WARNING!!
_	Toxic fumes may be released in fire situations.
	May cause eye irritation.
	Harmful if swallowed.
	May be harmful if inhaled.
	Cancer hazard.
	Powdered material may form explosive dust-air mixture.
	Slipping hazard.
	Isolate area.
	Keep upwind of spill.

#### Potential Health Effects

**Eyes:** May cause moderate eye irritation. May cause slight corneal injury.

**Skin:** Brief contact is essentially nonirritating to skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

**Inhalation:** No adverse effects are anticipated from single exposure to dust. Based on the available data, narcotic effects were not observed. Based on the available data, respiratory irritation was not observed.

Ingestion: Moderate toxicity if swallowed.

Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

#### Chronic Exposure: For the active ingredient(s):

Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure to active ingredient may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. In animals, effects have been reported on the following organs: Adrenal gland.

Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Chlorpyrifos did not interfere with fertility in reproduction studies in laboratory animals. Some evidence of toxicity to the offspring occurred, but only at a dose high enough to produce significant toxicity to the parent animals.

For the minor component(s):

Crystalline silica has been shown to cause cancer in laboratory animals and humans.

Lung fibrosis and tumors have been observed in rats exposed to titanium dioxide in two lifetime inhalation studies. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Workers exposed to titanium dioxide in the workplace have not shown an unusual incidence of chronic respiratory disease or lung cancer. Titanium dioxide was not carcinogenic in laboratory animals in lifetime feeding studies.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### This product is a mixture.

Component	CASRN	Weight percent	
Chlorpyrifos	2921-88-2	50.0%	
Calcium polysilicate	1344-95-2	29.0%	
Kaolin	1332-58-7	>= 0.4 - <= 9.6 %	
Titanium dioxide	13463-67-7	0.3%	
Silica, crystalline (quartz)	14808-60-7	0.1%	
Balance	Not available	>= 10.0 - <= 19.6 %	

## 4. FIRST AID MEASURES

#### **Description of first aid measures**

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**Skin contact:** Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.

**Eye contact:** Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

#### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. Attempt seizure control with diazepam 5-10 mg (adults) intravenous over 2-3 minutes. Repeat every 5-10 minutes as needed. Monitor for hypotension, respiratory depression, and need for intubation. Consider second agent if seizures persist after 30 mg. If seizures persist or recur administer phenobarbital 600-1200 mg (adults) intravenous diluted in 60 ml 0.9% saline given at 25-50 mg/minute. Evaluate for hypoxia, dysrhythmia, electrolyte disturbance, hypoglycemia (treat adults with dextrose 100 mg intravenous). Maintain adequate ventilation and oxygenation of the patient. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

## 5. FIREFIGHTING MEASURES

**Suitable extinguishing media:** Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

Unsuitable extinguishing media: no data available

#### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion

products may include and are not limited to: Sulfur oxides. Phosphorous compounds. Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur. Dense smoke is produced when product burns.

#### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Soak thoroughly with water to cool and prevent re-ignition. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Ventilate area of leak or spill. Isolate area. Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to section 7, Handling, for additional precautionary measures.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Good housekeeping and controlling of dusts are necessary for safe handling of product. Keep away from heat, sparks and flame. Avoid contact with eyes. Do not swallow. Avoid breathing dust. Avoid contact with skin and clothing. Wash thoroughly after handling. Keep container closed. Keep out of reach of children. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

Storage stability Avoid temperatures above 70 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Chlorpyrifos	ACGIH	TWA Inhalable	0.1 mg/m3
		fraction and vapor	_
	ACGIH	TWA	SKIN, BEI
	CA AB OEL	TWA	0.1 mg/m3
	CA BC OEL	TWA Inhalable	0.1 mg/m3
		vapour and aerosols	Ū.
	CA AB OEL	TWA	Absorbed via skin
	CA QC OEL	TWAEV	0.2 mg/m3
	CA QC OEL	TWAEV	Absorbed via skin
	CA BC OEL	TWA	Absorbed via skin
	CA ON OEL	TWAEV	Absorbed via skin
	ACGIH	TWA	SKIN, BEI
Calcium polysilicate	CA QC OEL	TWAEV Total	10 mg/m3
Kaolin	ACGIH	TWA Respirable	2 mg/m3
		fraction	Ū.
	CA AB OEL	TWA Respirable	2 mg/m3
	CA BC OEL	TWA Respirable	2 mg/m3
	CA QC OEL	TWAEV Respirable	5 mg/m3
Titanium dioxide	ACGIH	TWA	10 mg/m3
	CA AB OEL	TWA	10 mg/m3
	CA BC OEL	TWA	10 mg/m3
	CA QC OEL	TWAEV Total	10 mg/m3
Silica, crystalline (quartz)	CA AB OEL	TWA Respirable	0.025 mg/m3
		particulates	-
	CA ON OEL	TWA Respirable	0.1 mg/m3
		fraction	-
	CA QC OEL	TWAEV Respirable	0.1 mg/m3
	CA BC OEL	TWA Respirable	0.025 mg/m3
		•	Ũ

Consult local authorities for recommended exposure limits.

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

#### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

#### Individual protection measures

Eye/face protection: Use chemical goggles.

#### Skin protection

Hand protection: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be

handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Wear clean, body-covering clothing.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Powder
Color	Gray
Odor	Obnoxious
Odor Threshold	no data available
рН	8.6 10% pH Electrode (10% mixture in water)
Melting point/range	No test data available
Freezing point	Not applicable
Boiling point (760 mmHg)	Not applicable
Flash point	closed cup Not applicable
Evaporation Rate (Butyl Acetate	Not applicable
= 1) Elemmobility (colid gos)	May form combustible dust concentrations in sir
Flammability (solid, gas)	May form combustible dust concentrations in air
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	very low
Relative Vapor Density (air = 1)	Not applicable
Relative Density (water = 1)	Not applicable
Water solubility	Visual wettable powder
Partition coefficient: n- octanol/water	no data available
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available
Dynamic Viscosity	Not applicable
Kinematic Viscosity	Not applicable
Explosive properties	no data available
Oxidizing properties	no data available
Liquid Density	no testing required
Bulk density	0.277 g/cm3 Unspecified
Molecular weight	no data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

## **10. STABILITY AND REACTIVITY**

Reactivity: no data available

Chemical stability: Unstable at elevated temperatures.

Possibility of hazardous reactions: Polymerization will not occur.

Conditions to avoid: Avoid temperatures above 70 °C

Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible materials: Avoid contact with: Bases. Oxidizers.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen cyanide. Organic sulfides. Sulfur dioxide.

## 11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

#### Acute toxicity

#### Acute oral toxicity

Moderate toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

As product: LD50, rat, female, 382 mg/kg

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: LD50, rabbit, male and female, > 5,000 mg/kg

#### Acute inhalation toxicity

No adverse effects are anticipated from single exposure to dust. Based on the available data, narcotic effects were not observed. Based on the available data, respiratory irritation was not observed.

As product: LC50, rat, male and female, 4 Hour, Dust, > 2.53 mg/l No deaths occurred at this concentration.

#### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

#### Serious eye damage/eye irritation

May cause moderate eye irritation. May cause slight corneal injury.

#### Sensitization

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

#### Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

For the active ingredient(s):

Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure to active ingredient may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. In animals, effects have been reported on the following organs: Adrenal gland.

Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

#### Carcinogenicity

For the minor component(s): Lung fibrosis and tumors have been observed in rats exposed to titanium dioxide in two lifetime inhalation studies. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Workers exposed to titanium dioxide in the workplace have not shown an unusual incidence of chronic respiratory disease or lung cancer. Titanium dioxide was not carcinogenic in laboratory animals in lifetime feeding studies.

For the minor component(s): Crystalline silica has been shown to cause cancer in laboratory animals and humans.

Active ingredient did not cause cancer in laboratory animals.

#### Teratogenicity

For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

#### **Reproductive toxicity**

Chlorpyrifos did not interfere with fertility in reproduction studies in laboratory animals. Some evidence of toxicity to the offspring occurred, but only at a dose high enough to produce significant toxicity to the parent animals.

#### Mutagenicity

For the active ingredient(s): Based on a majority of negative data and some equivocal or marginally positive results, active ingredient is considered to have minimal genetic toxicity potential.

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

Carcinogenicity		
Component	List	Classification
Kaolin	IARC	Group 1: Carcinogenic to humans
Titanium dioxide	IARC	Group 2B: Possibly carcinogenic to humans
Silica, crystalline (quartz)	IARC	Group 1: Carcinogenic to humans

## **12. ECOLOGICAL INFORMATION**

Ecotoxicological information on this product or its components appear in this section when such data is available.

#### Toxicity

#### **Chlorpyrifos**

#### Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 0.003 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.00068 mg/l

#### Acute toxicity to algae/aquatic plants

EC50, Skeletonema costatum, 96 Hour, Growth inhibition (cell density reduction), 0.255 - 0.328 mg/l

**Toxicity to bacteria** EC50, activated sludge, > 100 mg/l

#### Chronic toxicity to fish

NOEC, Pimephales promelas (fathead minnow), 216 d, 0.000568 mg/l MATC (Maximum Acceptable Toxicant Level), Pimephales promelas (fathead minnow), 216 d, 0.00226 - 0.00325 mg/l

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), number of offspring, 0.000056 mg/l MATC (Maximum Acceptable Toxicant Level), Daphnia magna (Water flea), number of offspring, 0.000075 mg/l

#### **Toxicity to Above Ground Organisms**

Material is highly toxic to birds on a dietary basis (LC50 between 50 and 500 ppm). oral LD50, Other, 122mg/kg bodyweight. dietary LC50, Colinus virginianus (Bobwhite quail), 8 d, 423mg/kg diet. oral LD50, Apis mellifera (bees), 48 Hour, 0.36micrograms/bee contact LD50, Apis mellifera (bees), 48 Hour, 0.070micrograms/bee

#### Toxicity to soil-dwelling organisms

LC50, Eisenia fetida (earthworms), 14 d, 129 mg/kg

#### Calcium polysilicate

Acute toxicity to fish

No relevant data found.

#### <u>Kaolin</u>

## Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

#### Titanium dioxide

#### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis

(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). NOEC mortality, Leuciscus idus (Golden orfe), static test, 48 Hour, > 1,000 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 1,000 mg/l

#### Silica, crystalline (quartz)

Acute toxicity to fish Not expected to be acutely toxic to aquatic organisms.

#### **Balance**

Acute toxicity to fish

No relevant data found.

#### Persistence and degradability

#### **Chlorpyrifos**

**Biodegradability:** Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%). 10-day Window: Fail **Biodegradation:** 22 % **Exposure time:** 28 d **Method:** OECD Test Guideline 301D or Equivalent

#### **Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	0.000 %

#### Stability in Water (1/2-life) Hydrolysis, half-life, 72 d

#### Photodegradation

Test Type: Half-life (indirect photolysis) Sensitizer: Radicaux OH Atmospheric half-life: 1.4 Hour Method: Estimated.

#### Calcium polysilicate

**Biodegradability:** Biodegradation is not applicable.

#### <u>Kaolin</u>

Biodegradability: Biodegradation is not applicable.

#### **Titanium dioxide**

**Biodegradability:** Biodegradation is not applicable.

#### Silica, crystalline (quartz)

**Biodegradability:** Biodegradation is not applicable.

#### Balance

Biodegradability: No relevant data found.

#### **Bioaccumulative potential**

#### **Chlorpyrifos**

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 4.7 at 20 °C Estimated.

#### Calcium polysilicate

Bioaccumulation: Partitioning from water to n-octanol is not applicable.

#### Titanium dioxide

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### Silica, crystalline (quartz)

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### Balance

Bioaccumulation: No relevant data found.

#### Mobility in soil

#### **Chlorpyrifos**

Expected to be relatively immobile in soil (Koc > 5000). Partition coefficient(Koc): 8151

#### Calcium polysilicate

No relevant data found.

#### Silica, crystalline (quartz)

No relevant data found.

#### Balance

No relevant data found.

## **13. DISPOSAL CONSIDERATIONS**

Disposal methods: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## **14. TRANSPORT INFORMATION**

TDG

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Chloropyrifos)
UN number	UN 3077
Class	9
Packing group	III
Marine pollutant	Chloropyrifos

Classification for SEA transport ( Proper shipping name	IMO-IMDG): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
UN number Class Packing group Marine pollutant Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	N.O.S.(Chloropyrifos) UN 3077 9 III Chloropyrifos Consult IMO regulations before transporting ocean bulk
Classification for AIR transport (I	
Proper shipping name	Environmentally hazardous substance, solid,
UN number	n.o.s.(Chloropyrifos) UN 3077
Class	9
Packing group	III
Further information: NOT REGULATED PER TDG EXEM	IPTION 1.45.1 FOR ROAD OR RAIL

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## **15. REGULATORY INFORMATION**

### Hazardous Products Act Information: CPR Compliance

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

## Hazardous Products Act Information: WHMIS Classification

This product is exempt under WHMIS.

## National Fire Code of Canada

Not applicable

#### Canadian Domestic Substances List (DSL)

This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements.

Pest Control Products Act Registration Number: 20944

## **16. OTHER INFORMATION**

#### Hazard Rating System

NFPA

Health	Fire	Reactivity
2	2	1

### Revision

Identification Number: 101199476 / A215 / Issue Date: 12/04/2014 / Version: 5.2 DAS Code: XRM-4700 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

#### Legend

Absorbed via skin	Absorbed via skin
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA ON OEL	Canada. Ontario OELs
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1:
	Permissible exposure values for airborne contaminants
SKIN, BEI	Absorbed via Skin, Biological Exposure Indice
TWA	8-hour time weighted average
TWAEV	time-weighted average exposure value

#### Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW AGROSCIENCES CANADA INC. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.