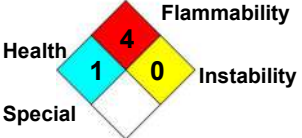





Material Safety Data Sheet

NFPA	HMIS	WHMIS	TDG	DOT								
	<table border="1"> <tr><td>Health</td><td>1</td></tr> <tr><td>Flammability</td><td>4</td></tr> <tr><td>Physical hazards</td><td>0</td></tr> <tr><td>Suggested PPE</td><td>B</td></tr> </table>	Health	1	Flammability	4	Physical hazards	0	Suggested PPE	B			
Health	1											
Flammability	4											
Physical hazards	0											
Suggested PPE	B											

1 . Product and Company Identification

Product name 5188500 PM 50 Residual Insecticide Aerosol	
Synonym	MSDS prepared by the Environment, Health & Safety Department on: 5/18/2010.
Material uses Consumer products: Insecticide	Version 1
MSDS Number 5188500	<u>In Case of Emergency</u> Transportation: 1-800-792-8311 Medical: 1-888-615-0015
Manufacturer Agrium Advanced Technologies, Inc. 10 Craig St. Brantford, ON N3R 7J1	
For more information on Agrium AT or our products, please go to: http://www.agriumat.com or contact us at Toll-Free:800-461-6471	

2 . Hazards Identification

Physical state	Liquid.
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<u>Potential acute health effects</u>	
Inhalation	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Skin	No known significant effects or critical hazards.
Eyes	No known significant effects or critical hazards.
<u>Potential chronic health effects</u>	
Chronic effects	Contains material that may cause target organ damage, based on animal data.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Target organs	Contains material which may cause damage to the following organs: the nervous system, central nervous system (CNS).
<u>Over-exposure signs/symptoms</u>	

2 . Hazards Identification

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Medical conditions aggravated by over-exposure	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
See toxicological information (section 11)	

3 . Composition / Information on Ingredients

United States

<u>Name</u>	<u>CAS number</u>	<u>%</u>
isobutane	75-28-5	10 - 30
White mineral oil (petroleum)	8042-47-5	3 - 7
propane	74-98-6	3 - 7

Canada

<u>Name</u>	<u>CAS number</u>	<u>%</u>
isobutane	75-28-5	10 - 30
White mineral oil (petroleum)	8042-47-5	3 - 7
propane	74-98-6	3 - 7

Mexico

<u>Name</u>	<u>CAS number</u>	<u>UN number</u>	<u>%</u>	<u>IDLH</u>	<u>Classification</u>				<u>Special</u>
					<u>H</u>	<u>F</u>	<u>R</u>		
isobutane	75-28-5	UN1956	10 - 30	-	0	4	0		
White mineral oil (petroleum)	8042-47-5	Not available.	3 - 7	-	0	0	0		
propane	74-98-6	1978	3 - 7	2100 ppm	0	0	0		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First Aid Measures

Eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4 . First Aid Measures

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting Measures

Flammability of the product In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

Special exposure hazards Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental Release Measures

Personal precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and Storage

Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure Controls / Personal Protection

United States

Ingredient	Exposure limits
isobutane	<p>NIOSH REL (United States, 6/2008). TWA: 800 ppm 10 hour(s). TWA: 1900 mg/m³ 10 hour(s).</p> <p>ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hour(s).</p>
White mineral oil (petroleum)	<p>ACGIH TLV (United States). TWA: 5 mg/m³ 8 hour(s).</p>
propane	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 1800 mg/m³ 8 hour(s). TWA: 1000 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2008). TWA: 1000 ppm 10 hour(s). TWA: 1800 mg/m³ 10 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 1000 ppm 8 hour(s). TWA: 1800 mg/m³ 8 hour(s).</p> <p>ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hour(s).</p>

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
propane	US ACGIH 1/2008	1000	-	-	-	-	-	-	-	-	
	AB 6/2008	1000	-	1800	1500	2700	-	-	-	-	
isobutane	BC 6/2008	1000	-	-	-	-	-	-	-	-	
	ON 6/2008	1000	-	-	-	-	-	-	-	-	
	QC 6/2008	1000	-	1800	-	-	-	-	-	-	
	US ACGIH 1/2008	1000	-	-	-	-	-	-	-	-	
White mineral oil (petroleum)	BC 6/2008	1000	-	-	-	-	-	-	-	-	
	ON 6/2008	800	-	1900	-	-	-	-	-	-	
	US ACGIH	-	-	5	-	-	-	-	-	-	

Mexico

Ingredient	Exposure limits

8 . Exposure Controls / Personal Protection

isobutane	ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hour(s).
White mineral oil (petroleum)	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hour(s).
propane	ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hour(s).
Oxygen Depletion [Asphyxiant]	

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering measures	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

<u>Environmental exposure controls</u>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
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9 . Physical and Chemical Properties

Physical state	Liquid.
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10 . Stability and Reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	No specific data.
Materials to avoid	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological Information

United States

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
5188500 PM 50 Residual Insecticide Aerosol	LD50 Oral	Rat	5000 mg/kg	-

Canada

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
5188500 PM 50 Residual Insecticide Aerosol	LD50 Oral	Rat	5000 mg/kg	-

Mexico

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure

11 . Toxicological Information

5188500 PM 50 Residual Insecticide Aerosol LD50 Oral Rat 5000 mg/kg -

12 . Ecological Information

Environmental effects No known significant effects or critical hazards.



United States**Canada****Mexico****13 . Disposal Considerations****Waste disposal**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport Information

Regulatory information	UN number	Shipping name	Classes	PG*	Label	Additional information
DOT Classification	1950	Aeorsol, Flammable (isobutane)	2.1	-		-
TDG Classification	1950	Aeorsol, Flammable	2.1	-		-

14 . Transport Information

Mexico Classification	Not available.	Not available.	Not available.	-	-
PG* : Packing group					

15 . Regulatory Information

United States

HCS Classification Target organ effects

U.S. Federal regulations **United States inventory (TSCA 8b):** Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: isobutane; propane

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
isobutane: Fire hazard, Sudden release of pressure; propane: Fire hazard, Sudden release of pressure

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: isobutane; propane

Clean Air Act (CAA) 112 regulated flammable substances: isobutane; propane

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) Not listed

Clean Air Act Section 602 Class I Substances Not listed

Clean Air Act Section 602 Class II Substances Not listed

DEA List I Chemicals (Precursor Chemicals) Not listed

DEA List II Chemicals (Essential Chemicals) Not listed

State regulations

Connecticut Carcinogen Reporting: None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.

Louisiana Spill: None of the components are listed.

Massachusetts Spill: None of the components are listed.

Massachusetts Substances: The following components are listed: PROPANE; ISOBUTANE

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: The following components are listed: PROPANE; Isobutane

15 . Regulatory Information

New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: None of the components are listed.
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed:
 PROPANE; PROPANE, 2-METHYL-
Rhode Island Hazardous Substances: None of the components are listed.

United States inventory (TSCA 8b)

Not determined.

Canada

WHMIS (Canada)

Class B-5: Flammable aerosol.

Canadian lists

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: Propane; Butane; White mineral oil
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

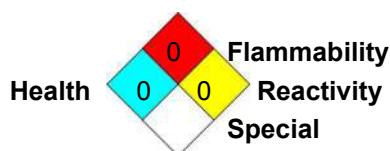
Canada inventory

Not determined.

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 Controlled Products Regulations.

Mexico

Classification



EU regulations

Hazard symbol or symbols



Risk phrases

R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

S29- Do not empty into drains.
 S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

International regulations

International lists

Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.

15 . Regulatory Information

Chemical Weapons Convention List
Schedule I Chemicals

Not listed

Chemical Weapons Convention List
Schedule II Chemicals

Not listed

Chemical Weapons Convention List
Schedule III Chemicals

Not listed

16 . Other information

Label requirements CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

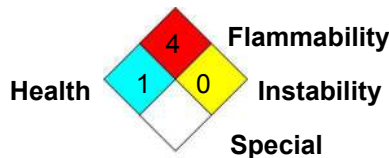
Hazardous Material Information System (U.S.A.)

Health	1
Flammability	4
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.

National Fire Protection Association (U.S.A.)



Date of issue 5/18/2010.

Version 1

☑ Indicates information that has changed from previously issued version.

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16 . Other information

and facts available on the date of preparation.