

Material Safety Data Sheet

NFPA		HMIS	WHMIS		TDG	DOT		
Flammability Health 2 0 Instability		2 2 0		MARINE POLITION				
Special	Su	Iggested PPE B						
1. Product	t and Co	ompany Iden	tification					
Product name	5113600,	5113700 Dragne	et FT Emulsifal	ble In	secticide			
Synonym	Permethrin	PCP Act Registratio	n # 24175	MSDS prepared by the 11/23/2010. Environment, Health & Safety Department on:				
Material uses	Insecticide	and germicide.		Version 7				
Product Code					In Case of Eme	ergency		
MSDS Number 5113600, 5113700 Transportation: 1-800-792-8 Medical: 1-888-615-0015 Medical: 1-888-615-0015								
Manufacturer	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				
	la Islavat	fleetien						
	is ident	ification						
Physical state		Liquid.						
OSHA/HCS statu	S	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).						
Emergency over	view	WARNING!						
		HARMFUL IF SWALLOWED.						
		Harmful if swallowed. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Highly toxic to fish and aquatic organisms.						
Potential acute h	ealth effect	<u>S</u>						
Inhalation		May irritate the resp	piratory tract if inha	aled. H	armful by inhalation.			
Ingestion		Toxic if swallowed.						
Skin		May cause skin irrit	tation.					
Eyes		May irritate the eye	s upon contact.					
Potential chronic	<u>health effe</u>	cts						
Chronic effects		No known significa	nt effects or critica	l hazar	ds.			
Carcinogenicity		No known significa	nt effects or critica	l hazar	ds.			
Mutagenicity		No known significant effects or critical hazards.						
Teratogenicity		No known significant effects or critical hazards.						
Developmental e	ffects	No known significant effects or critical hazards.						
Fertility effects		No known significant effects or critical hazards.						

2. Hazards Identification

<u>Over-exposure signs/symptoms</u>

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Medical conditions aggravated by over- exposure	None known.

See toxicological information (section 11)

3. Composition	/ Information on Ingredients		
0: Composition			
<u>United States</u>			
<u>Name</u>		<u>CAS number</u>	<u>%</u>
permethrin (ISO)		52645-53-1	36.8
<u>Canada</u>			
<u>Name</u>		<u>CAS number</u>	<u>%</u>
permethrin (ISO)		52645-53-1	36.8
<u>Mexico</u>		Clas	sification
<u>Name</u>	CAS number UN number % IDLH	ΗE	<u>R</u> <u>Special</u>
permethrin (ISO)	52645-53-1 3082 36.8 -	2 2	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

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.
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 if irritation develops. Wash thououghly with soap and water after handling.
If inhalation occurs, remove individual(s) to fresh air. Loosen restrictive clothing items if necessary. If individual has irregular or difficulty breathing or is under respiratory arrest seek medical attention immediately. If other conditions or symptoms develop contact a physician.
If ingestion occurs, rinse mouth with copious amounts of water. Do Not induce vomiting unless directedto do so by trained medical personnel. Do Not give anything by mouth to unconcious individuals. Seek immediate medical attention.
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4. First Aid Measures

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 halogenated compounds
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. Do not breathe 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. Alternatively, or if water-insoluble, 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 . Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. Store in accordance with local regulations. Store in original container protected from Storage 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

Occupational exposure limits		TWA	TWA (8 hours)			STEL (15 mins)			Ceiling		
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m³	Other	ppm	mg/m ³	Other	Notations
No exposure limit value knowr.	List name	ppm	ing/in	other	ppin	ing/in	ouler	ppm	ing/in	other	Notationa
L	<u>Consult lo</u>	cal aut	horities	for acc	eptabl	e expos	ure lim	its.	ļ	ļ	
Recommended monitoring procedure	If this proc s atmosphe the ventila protective	re or bio ition or o	ological other co	monitor	ing may	, be req	uired to	determ	nine the	effective	
Engineering measures	No special control wo with expose engineering limits.	orker ex sure lim	posure t its, use	o airbor process	ne cont enclos	taminan sures, lo	ts. If thi cal exha	s produ aust vei	uct conta ntilation	ains ingi or other	edients
Hygiene measures	Wash har eating, sm Appropria Wash con showers a	oking a te techr taminat	ind using iques sl ed cloth	g the lay nould be ing befo	atory a used to re reus	ind at th to remov sing. En	e end of ve poter	f the wo ntially c	orking p ontamin	eriod. ated clo	thing.
Personal protection											
Respiratory	Use a pro standard i based on safe work	f a risk known (assessn or anticij	nent ind	icates t cposure	his is ne e levels,	ecessary	/. Res	pirator s	election	must be
Hands	Chemical- worn at al is necessa	l times v	nt, imper when ha	vious g ndling c	loves c hemica	omplying al produc	g with a cts if a ri	n appro sk ass	oved sta essmen	ndard sl t indicat	nould be es this
Eyes	Safety eye assessme dusts.										
Skin	Personal being perf handling t	ormed a	and the								

8. Exposure Controls / Personal Protection

Environmental exposure controls 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.

9. Physical and Chemical Properties

Physical state

VOC

Liquid. 20.2 % (w/w)

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.
Conditions of reactivity	Highly flammable in the presence of the following materials or conditions: oxidizing materials, acids and alkalis.

11. Toxicological Information

United States

	rmal Rat		Dose 1750 mg/kg 383 mg/kg	9	Exposu - -	Ire
ACGIH -	IARC 3	EPA -	NIOSH -	NTP -	-	OSHA
Result	Spe	ecies	Dose		Exposi	Ire
	LD50 Der LD50 Ora	LD50 Dermal Rat LD50 Oral Rat ACGIH IARC - 3	LD50 Dermal Rat LD50 Oral Rat	LD50 Dermal Rat 1750 mg/kg LD50 Oral Rat 383 mg/kg	LD50 Dermal Rat 1750 mg/kg 383 mg/kg ACGIH IARC EPA NIOSH NTP - 3	LD50 Dermal Rat 1750 mg/kg - LD50 Oral Rat 383 mg/kg -

	al Information			
permethrin (ISO)	LD50 Dermal LD50 Oral	Rat Rat	1750 mg/kg 383 mg/kg	-
 Classification Product/ingredient name permethrin (ISO) 	ACGIH IA - 3	RC EPA	NIOSH NTP 	OSHA -
_ 				
Product/ingredient name permethrin (ISO) 	Result LD50 Dermal LD50 Oral	Species Rat Rat	Dose 1750 mg/kg 383 mg/kg	Exposure - -
 Product/ingredient name	ACGIH IAI	RC EPA	NIOSH NTP	OSHA
permethrin (ISO) 				
12 . Ecological l	nformation			
Environmental effects United States	nformation No known significant effect	ts or critical hazards.		
Environmental effects <u>United States</u> Aquatic ecotoxicity Product/ingredient name		Result	Species Daphnia - Water flea - Daphnia magna - Instar - <=24 hours	Exposure 48 hours
Environmental effects <u>United States</u> Aquatic ecotoxicity Product/ingredient name	No known significant effect	Result Acute LC50 1.25 to 2.02 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar -	48 hours
12 . Ecological In Environmental effects <u>United States</u> <u>Aquatic ecotoxicity</u> Product/ingredient name permethrin (ISO)	No known significant effect	Result Acute LC50 1.25 to 2.02 ug/L Fresh water Acute LC50 0.54 to 19.3 ug/L	Daphnia - Water flea - Daphnia magna - Instar - <=24 hours Daphnia - Water flea - Daphnia magna - Instar -	48 hours
Environmental effects United States Aquatic ecotoxicity Product/ingredient name permethrin (ISO)	No known significant effect	Result Acute LC50 1.25 to 2.02 ug/L Fresh water Acute LC50 0.54 to 19.3 ug/L	Daphnia - Water flea - Daphnia magna - Instar - <=24 hours Daphnia - Water flea - Daphnia magna - Instar -	48 hours

12. Ecological Information

12. Ecological in	formation			
permethrin (ISO)	-	Acute LC50 1.25 to 2.02 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - <=24 hours	48 hours
	-	Acute LC50 0.54 to 19.3 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - 4 to 5 days	48 hours
Mexico				
Aquatic ecotoxicity				
Product/ingredient name permethrin (ISO)	Test -	Result Acute LC50 1.25 to 2.02 ug/L Fresh water	Species Daphnia - Water flea - Daphnia magna - Instar - <=24 hours	Exposure 48 hours
	-	Acute LC50 0.54 to 19.3 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Instar - 4 to 5 days	48 hours

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. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. 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	3082	(permethrin (ISO)). Marine pollutant	9	111		Marine pollutant
TDG Classification	3082	(permethrin (ISO)). Marine pollutant (permethrin (ISO))	9	111	Mappe Polland	Marine pollutant

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14. Transport Information						
Mexico Classification	3082	(permethrin (ISO)). Marine pollutant (permethrin (ISO))	9			Marine pollutant

15. Regulatory I	nformation		
United States			
HCS Classification	Toxic material		
U.S. Federal regulations	TSCA 8(a) IUR: Partial exemption United States inventory (TSCA 8b): Not deter	mined.	
	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: permethrin (ISO) SARA 311/312 MSDS distribution - chemical inventory - hazard identification: permethrin (ISO): Immediate (acute) health hazard, Delayed (chronic) health hazard		
	Clean Air Act (CAA) 112 accidental release p	revention: No prod	lucts 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		
<u>SARA 313</u>			
Form R - Reporting requirements	<u>Product name</u> permethrin (ISO)	<u>CAS number</u> 52645-53-1	Concentration 36.8
Supplier notification	permethrin (ISO)	52645-53-1	36.8

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

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: PERMETHRIN Michigan Critical Material: None of the components are listed.
	Minnesota Hazardous Substances: None of the components are listed. New Jersey Hazardous Substances: None of the components are listed.

5113600, 5113700 Dragnet FT Emulsifable Insecticide

15. Regulatory I	nformation
	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: None of the components are listed. Rhode Island Hazardous Substances: None of the components are listed.
United States inventory (TSCA 8b)	Not determined.
<u>Canada</u>	
WHMIS (Canada)	Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Canadian lists	CEPA Toxic substances: None of the components are listed. Canadian ARET: None of the components are listed. Canadian NPRI: None of the components are listed. 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.
	ssified in accordance with the hazard criteria of the Controlled Products contains all the information required by the Controlled Products Regulations.
<u>Mexico</u>	
Classification	
	Health 2 0 Flammability Beactivity Special
EU regulations	
Hazard symbol or symbols	
Risk phrases	R20/22- Harmful by inhalation and if swallowed. R43- May cause sensitization by skin contact. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	 S2- Keep out of the reach of children. S24- Avoid contact with skin. S29- Do not empty into drains. S37- Wear suitable gloves. S46- If swallowed, seek medical advice immediately and show this container or label. 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: All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined.

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15. Regulatory Information

To : Regulatory	
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	HARMFUL IF SWALLOWED.
Hazardous Material Information System (U.S. A.)	
	Health
	Flammability
	Physical hazards
hazards or risks Although HMIS® ra HMIS® ratings are to be used with a	n a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant tings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Is may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for det Consult a specialist before handling	ermining the PPE code for this material. Suggested protective clothing might not be adequate. I this product.
National Fire Protection Association (U.S.A.)	
	2 Flammability
	Health 2 0 Instability
	Special
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Version	7
Indicates information that	t has changed from previously issued version.

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