Last Updated: January 28, 2010

Material Safety Data Sheet

Section 1 – Product Identification

Product Name:	PyroFos™ 1.5 ULV Vector Control Insecticide	EPA Registration #:	53883-251
Manufacturer:	Control Solutions Inc. 5903 Genoa- Red Bluff Pasadena, TX 77507 281-892-2500	EPA Establishment #:	53883-TX-002

Section 2 – Chemical Composition

Material	CAS #	% by Weight	OSHA PEL/ACGIH TLV
Chlorpyrifos	002921-88-2	19.36%	ACGIH: 0.2 mg/m^3
Inert Ingredients	64742-55-8	80.64%	OSHA: 5 mg/m^3 (oil mist) 500 ppm (petroleum solvent)

Section 3 – Hazard Identification

Symptoms of Toxicity:	Chlorpyrifos is a cholinesterase inhibitor. May cause headache, dizziness, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. Chronic exposure may cause peripheral neuropathy.
Flammability:	Slightly combustible.
Reactivity:	Stable under most conditions. May break down into various toxic constituents under elevated temperatures. Avoid temperatures > 40^oC.
Carcinogenicity:	No evidence of carcinogenicity in long term animal studies.

Section 4 – First Aid

Eye Contact:	Flush eyes with water for 15 minutes. Seek medical attention if irritation persists.
Inhalation:	Move person to fresh air. If person is not breathing, give artificial respiration. Call a poison control center for further treatment advice.
Ingestion:	Call poison control center immediately for treatment advice. Do not induce vomiting unless directed to do so by a poison control center. Do not give anything by mouth to an unconscious person.
Dermal Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center for treatment advice if irritation persists.
Notes/Physician's Information:	You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.

Section 5 – Fire and Explosion Hazards

Flash Point:	165.2°F	Upper Flammability Limit:	N/A
Extinguishing Media:	Foam, dry chemical, CO_2, water fog	Lower Flammability Limit:	N/A
Special Procedures:	Foam systems are preferred. Use SCBA with full-face piece and protective clothing.		
Unusual Fire Hazards:	Possible toxic smoke, vapors, fallout and runoff water can result from fires. Heated containers can rapidly pressurize/rupture.		
Reactivity/Stability:	Unstable at elevated temperatures. May release organic sulfides and HCl when burned. Hazardous polymerization will not occur.		

Section 6 – Spill/Release Procedures

Absorbent:	Universal or oil-only absorbent pads, vermiculite, absorbent booms, or clay granules.
Containment:	Do not discharge into municipal wastewater or public storm drains. Eliminate runoff as much as possible.
Waste Disposal:	Dispose of contaminated material in municipal land fill or through licensed TSDF. Not a hazardous waste under RCRA, 40 CFR 261.
Reporting:	Report all major spills and uncontrolled releases to proper local, state, and federal agencies. RQ – As a mixture, 5.165 pounds or 2/3 gal.
Emergency Contact #:	Chemtrec: 1-800-424-9300

Section 7 – Storage and Handling Instructions

Storage Conditions:	Do not store near foodstuffs or feed. Store in a cool, dry, well-ventilated area away from flammable materials and sources of heat. Keep away from oxidizing agents and alkaline material.
Special Handling Considerations:	Exercise caution to prevent damage to or leakage from the container. Workers should follow good hygiene practices to avoid accidental ingestion.
Container Disposal:	Do not reuse empty containers. Triple rinse (or equivalent), then offer for recycling or render unusable and dispose of in municipal landfill or with licensed TSDF.

Section 8 – Protective Equipment/Engineering Controls

Eye Protection:	ANSI approved goggles or safety glasses with side shields.
Respiratory Protection:	NIOSH approved half-mask or full-face with any N, P, or HE type filter.
Dermal Protection:	Gloves, long sleeves, pants and shoes.
Engineering Controls:	Use only in adequately ventilated areas.

Section 9 – Physical Data

Odor:	Petroleum odor.	Melting Point:	N/A
Physical State:	Liquid.	Flash Point:	165.2°F
Color:	Light straw.	Specific Gravity:	0.93 (g/ml)
Bulk Density:	See specific gravity.	pH:	N/A
Vapor Pressure:	N/A	Water Solubility:	Negligible
Viscosity:	N/A	Refractive Index:	N/A

Section 10 – Toxicity

EPA Toxicity Category:		Oral LD_{50}:	> 1923 mg/kg
Skin Contact:	Mildly irritating	Dermal LD_{50}:	>5000 mg/kg
Eye Contact:	Irritating	Inhalation LC_{50}:	>2.3 mg/L
HMIS/NFPA Classification:	Fire - 1 Health - 2 Reactivity - 1	Fire - 1 Health - 2 Reactivity - 1 Special - none	
Other Comments:	Avoid cross contamination. Always wash hands thoroughly after handling pesticides and before eating, drinking, or smoking.		

Section 11 – Ecological Data

Aquatic:	LC_{50} – Chlorpyrifos < 1.0 mg/L
Avian:	N/A
Bioaccumulation:	Will not bioaccumulate.
Summary:	This product is extremely toxic to fish. Do not apply directly to water. Drifts and runoff from treated areas may be hazardous to aquatic organisms in treated areas.

Section 12 – Transportation

DOT:	RQ, Environmentally hazardous substance, liquid, n.o.s. (contains chloropyrifos), UN3082, Class 9, PG III
IATA:	RQ, Environmentally hazardous substance, liquid, n.o.s. (contains chloropyrifos), UN3082, Class 9, PG III
IMDG:	RQ, Environmentally hazardous substance, liquid, n.o.s. (contains chloropyrifos), UN3082, Class 9, PG III, marine pollutant

Section 13 – Regulatory

Section 302/TPQ: (emergency planning)	Not regulated under section 302.
Section 304/EHS RQ: (release notification)	Not regulated under section 304.
CERCLA RQ: (release notification)	RQ for Chlorpyriphos is 1 pound. As a mixture: RQ – 5.165 pounds or 2/3 gal. Report all qualifying releases to proper local, state, and federal agencies.
Section 311/Tier II: (MSDS submission)	Acute health hazard. Delayed health hazard. Fire hazard.
Section 313/TRI Chemicals:	Chlorpyrifos. CAS #: 002921-88-2
RCRA Haz-Waste Code(s):	Not an RCRA hazardous waste.
CAA TQ: (air emissions)	Not regulated under the CAA.

Section 14 – Other

NFPA and HMIS ratings assigned to this product are based on the hazards of its ingredient (s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

The information provided on this Material Safety Data Sheet is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Control Solutions, Inc. The data on this sheet relates only to the specific material designated herein. Control Solutions, Inc. assumes no legal responsibility for the accuracy or completeness of this data, nor for use or reliance upon this data.