

**FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:
CHEMTREC 1-800-424-9300**

Section 1—Chemical Product and Company Identification		
Product Name:	Tundra® Supreme	EPA Reg. No.: 1381-243
Common Name:	Insecticide	
Chemical Description:	Chlorpyrifos + Bifenthrin	
Manufacturer's Name: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589		Medical Emergency Telephone Number: 1-877-424-7452 MSDS Date: 05/17/2013 Supersedes document dated 10/22/10

Section 2—Hazards Identification
Emergency Overview: MAY BE FATAL IF SWALLOWED. Light red, transparent liquid with pungent odor. Product may cause oxygen deficiency in enclosed spaces; follow all OSHA regulations pertaining to confined space entry. See health effects below. CAUTION: Keep out of reach of children. Route(s) of Entry: Eyes, Inhalation, Skin, and Ingestion.
Health Hazards (Acute and Chronic): Inhalation: Inhalation of mist may cause irritation of the upper respiratory tract. Eyes: Causes substantial but temporary eye injury. Skin: Contact may cause irritation. Ingestion: May be fatal if swallowed.
Medical Conditions Generally Aggravated by Exposure: None known. Preexisting respiratory conditions may be aggravated by exposure to mists.

Section 3—Composition Information on Ingredients		
Ingredient	% (wt)	CAS reg. #
Chlorpyrifos	28.6%	2921-88-2
Bifenthrin	9.0%	82657-04-3
Aromatic hydrocarbon	<46.1%	64742-94-5
Napthalene (from aromatic hydrocarbon)	<4.6%	91-20-3
n-Butyl Alcohol	<0.3%	71-36-3
C(11-13) Branched Alkyl Benzene Sulfonic Acid, Calcium Salts	<0.6%	68953-96-8

NFPA HAZARD RATING:			
0	Least		
1	Slight	3	Health
2	Moderate	2	Flammability
3	High	0	Reactivity
4	Severe		

*Ingredients not specifically listed are non-hazardous and are claimed as confidential business information.

Section 4—First Aid Measures	
Inhalation:	Remove person to fresh air and assist breathing as needed. Seek medical attention if irritation persists.
Ingestion:	Seek medical attention or call a poison control center immediately. Do not induce vomiting unless told to do so by a doctor or Poison Control Center.
Eyes:	Flush with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. Seek medical attention if eye irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water, and then wash with soap and water. Seek medical attention if skin becomes irritated.
Note to Physician: This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). 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. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5—Fire and Explosion Hazard Data

Extinguishing Media: Water fog or fine spray, carbon dioxide, dry chemical and/or foam. Do not use direct water stream.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components. Contain run-off by diking to prevent contamination of water supplies.
Hazardous Combustion Products: Toxic gases may be formed in a fire situation. Carbon monoxide and other asphyxiates may form as well.
Unusual Fire and Explosion Hazards: Closed containers may explode from vapor expansion in high heat. Vapors from the aromatic hydrocarbons are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Section 6—Accidental Release Measures

Small Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mists. Eliminate all surrounding ignition sources. Spills should be cleaned up immediately to prevent spreading.
Large Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mist. Eliminate all surrounding ignition sources. After removal, wash the spill area, tools, and equipment with a strong soap and water solution. Absorb any excess liquid and add to the recovery containers of waste already collected.
Containment: Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. Contain spills and absorb liquids by covering with clay or other absorbent material. Vacuum, scoop, or sweep up waste and place in a container for disposal.

Section 7—Precautions for Safe Handling and Use

Precautions to Be Taken in Handling and Storage: Store in cool, dry areas away from children, feed and food products and sources of heat. Immediately clean up spills that occur during handling or storage. Protect from freezing. Keep containers closed when not in use. Do not store in aluminum or metal vessels.
Other Precautions: Consult Local, State, and Federal regulations pertaining to storage and disposal.

Section 8—Control Measures/Personal Protection

Exposure Limits: Chlorpyrifos 0.1 mg/m³ (ACGIH TLV)
Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a properly FIT TESTED MSHA/NIOSH-approved respirator.
Ventilation: **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.
Protective Gloves: Wear chemically protective gloves.
Eye Protection: Wear protective eyeglasses or chemical safety goggles. Contact lenses are not eye protective devices.
Other Protective Clothing or Equipment: Wear chemically protective boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
Work/Hygienic Practices: Never eat, drink, nor smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
NOTE TO END USERS: Refer to the product label for complete Personal Protective Equipment.

Section 9—Physical/Chemical Characteristics

Physical State:	Liquid	Specific Gravity (H₂O=1):	1.035
Vapor Pressure (mm Hg):	Not determined	Freezing Point:	Not determined
Vapor Density (Air=1):	Not determined	Boiling Point:	Not determined
Solubility in Water (wt %):	Not determined	pH (1% solution):	4.6
Appearance and odor:	Light red, transparent liquid with pungent odor	Flash Point:	136°F

Section 10—Reactivity Data

Stability: Product stable at room temperature in closed containers under normal storage and handling conditions.
Chemical Incompatibilities: Strong bases and acids.
Conditions to Avoid: Avoid excessive heat.
Hazardous Decomposition Products: Oxides of sulfur, nitrogen, and other chemicals may be formed in a fire situation. Carbon monoxide and other asphyxiates may form as well.
Hazardous Polymerization: Not known to occur.

Section 15—Regulatory Information

TSCA Inventory: This product is exempt from listing requirements as it is solely for FIFRA regulated use.

SARA Title III, Section 302: None listed

SARA Title III, Section 311/312:	Immediate: Yes	Delayed: Yes
Sudden Release of Pressure: No	Fire: Yes	Reactive: No

SARA Title III, Section 313: Bifenthrin (CAS #82657-04-3): 9.0%
Naphthalene (CAS #91-20-3): <4.6%
n-Butanol (CAS #71-36-3): <0.3%

CERCLA: Chlorpyrifos (CAS #2921-88-2) has an RQ of 1 lb (reached with 2.47 gallons of product)
n-Butanol (CAS #71-36-3) has an RQ of 5,000 lbs (not reached with any practical quantity of product)

PROPOSITION 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

Section 16—Other

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of Winfield Solutions' knowledge. Winfield Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

Sections Revised: 2, 13, 14, 15