


NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least			Not regulated by the U.S. DOT as a hazardous material. See Section 14 for additional information.	
1	Slight	1	Health		
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name:	Nitro Shield® IV
EPA Registration #:	1381-252
Product ID/Unity #:	1494138
Common Name:	Chloronicotinyl insecticide
Chemical Description:	Imidacloprid
Recommended Uses:	Agricultural insecticide. See product label for complete list of uses and use sites.
Restrictions for Use:	See product label for information regarding restrictions on the use of this product.
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	<b>MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs)</b>  <b>Non-Emergency Business Inquiries: 1-855-494-6343</b> Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
<b>EMERGENCY OVERVIEW:</b> Off-white viscous liquid with a moderate paint-like odor. May cause eye and skin irritation. May be harmful if swallowed. Extremely toxic to fish, water organisms and bees.	
<b>POTENTIAL HEALTH EFFECTS:</b>	
Eyes: Causes mild eye irritation.	
Skin: Causes mild skin irritation.	
Inhalation: May cause upper respiratory tract irritation.	
Ingestion: May be harmful if swallowed.	
Preexisting Conditions: None known.	
Chronic Health Effects: None known.	
Carcinogenicity	NTP: Not listed                      IARC: Not listed                      OSHA: Not listed
<b>OSHA HCS 2012 CLASSIFICATION:</b> Acute Oral Toxicity Category 4; Eye Irritation Category 2A; Acute Inhalation Toxicity Category 4	
<b>SIGNAL WORD:</b> WARNING	
<b>HAZARD STATEMENTS:</b>	
Causes eye irritation. Harmful if swallowed. Harmful if inhaled.	
Percent of product with unknown toxicity: 0%	
<b>PRECAUTIONARY STATEMENTS:</b>	
<b>Prevention:</b> Wash hands thoroughly after handling. Avoid breathing mist, vapors, spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.	

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<b>Response:</b>	<b>If in eyes:</b> Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. <b>If inhaled:</b> Remove person to fresh air and keep comfortable for breathing. Call a poison control center (1-877-424-7452) or doctor for treatment advice if you feel unwell. <b>If Swallowed:</b> Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Rinse mouth.
<b>Storage:</b>	See Section 7 for storage information.
<b>Disposal:</b>	Dispose of contents/container in accordance with Federal, state and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Imidacloprid	40.7%	138261-41-3
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(i).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
<b>Inhalation:</b>	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
<b>Ingestion:</b>	Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Eyes:</b>	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
<b>Skin:</b>	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES
<b>Suitable Extinguishing Media:</b> Foam, dry chemical, carbon dioxide, or water spray.
<b>Special Fire Fighting Procedures:</b> Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
<b>Hazardous Combustion Products:</b> Hydrogen cyanide, hydrogen chloride, carbon monoxide, nitrogen oxides
<b>Unusual Fire and Explosion Hazards:</b> Product can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion. Strong exothermal reaction can occur above 390°F (200°C).

SECTION 6: ACCIDENTAL RELEASE MEASURES
<b>Personal Precautions:</b> Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
<b>Environmental Precautions:</b> This product is extremely toxic to fish and water organisms. Keep spilled product from entering sewers and/or waterways.
<b>Methods for Containment:</b> Contain spilled product by diking area with sand or earth.
<b>Methods for Clean-up:</b> Cover spilled product with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
<b>Other Information:</b> None known

**SECTION 7: HANDLING AND STORAGE**

**Handling:** RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.  
**Storage:** Store in cool, dry areas away from children, feed and food products and sources of heat. Store in original container with lid tightly closed. Do not store in direct sunlight. See pesticide product label for additional storage information.  
**Minimum Storage Temperature:** 32°F  
**Other Precautions:** Consult Federal, state and local laws and regulations pertaining to storage.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Component:	OSHA PEL	ACGIH TLV	NIOSH REL
No components have established limits			

**NOTE TO END USERS:** PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.

**Respiratory Protection:** When used in areas with inadequate ventilation, use a NIOSH approved respirator with cartridges/canisters approved for general particulates.

**Engineering Controls:** **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

**Protective Gloves:** Wear chemical resistant gloves.  
**Eye Protection:** Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices. An emergency eyewash or water supply should be readily accessible to the work area.  
**Other Protective Clothing or Equipment:** Wear long sleeve shirt, long pants and chemical resistant footwear plus socks to prevent skin exposure.

**Work/Hygienic Practices:** Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.12 – 1.18 (typical)
<b>Vapor Pressure (mm Hg):</b>	Not determined	<b>Density (lbs/gallon):</b>	9.35 – 9.85 lbs/gallon
<b>Vapor Density (Air=1):</b>	Not determined	<b>Melting Point/Freezing Point:</b>	Not determined
<b>Solubility in Water (wt %):</b>	Not determined	<b>Boiling Point/Range:</b>	Not determined
<b>Viscosity:</b>	163 mPa/s @ 20°C	<b>pH:</b>	5.9 – 7.9
<b>Appearance and odor:</b>	Off-white viscous liquid with a mild paint-like odor	<b>Flash Point:</b>	>212°F (100°C)

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** None known  
**Chemical Stability:** Product is stable at ambient temperature and pressure, under normal storage and handling conditions.  
**Possibility of Hazardous Reactions:** Will not occur.  
**Conditions to Avoid:** Avoid temperatures above 100°F (38°C) for prolonged periods of time. Strong exothermic reaction can occur above 390°F (200°C).  
**Incompatible Materials:** None known.  
**Hazardous Decomposition Products:** Hydrogen cyanide, hydrogen chloride, carbon monoxide, nitrogen oxides

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>ACUTE TOXICITY</b>	
Eye Effects:	Causes mild eye irritation.
Skin Effects:	Causes slight skin irritation; LD50 >2,000 mg/kg; Not a skin sensitizer.
Acute Inhalation Effects:	LC50 >2.0 mg/L
Acute Oral Effects:	LD50 >1,100 mg/kg
Specific Target Organ Toxicity:	None known
<b>CHRONIC TOXICITY</b>	
Chronic Effects:	None known
Carcinogenicity:	None known
Mutagenicity:	None known
Teratogenicity:	None known
Reproductive Toxicity:	None known
<b>POTENTIAL HEALTH EFFECTS:</b>	
Eyes:	Causes mild eye irritation.
Skin:	Causes mild skin irritation.
Inhalation:	May cause upper respiratory tract irritation.
Ingestion:	May be harmful if swallowed.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>ENVIRONMENTAL SUMMARY:</b> This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. This product is toxic to wildlife and highly toxic to aquatic invertebrates. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water.	
<b>ECOTOXICITY DATA:</b>	
Fish Acute and Prolonged Toxicity:	Imidacloprid Technical: Rainbow trout LC50 = 211 mg/L (96 hour)
Aquatic Invertebrate Acute Toxicity:	Not available
Aquatic Plant Toxicity:	Not available
Bird Acute and Prolonged Toxicity:	Imidacloprid Technical: Bobwhite Quail Oral LC50 = 1,500 ppm
Honeybee Toxicity:	Highly toxic
<b>ENVIRONMENTAL EFFECTS:</b>	
Soil Absorption/Mobility:	Imidacloprid is soluble in water and has the potential to leach in permeable soil types.
Persistence and degradability:	Imidacloprid has a soil half-life of 29 – 225 days depending on soil type and conditions.
Bioaccumulative Potential:	Not available
Other adverse effects:	Not available

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>Waste:</b>	Dispose of in accordance with applicable Federal, state and local laws and regulations.
<b>Container:</b>	Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. See pesticide product label for full instructions on disposal.
<b>RCRA Characteristics:</b>	It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

**SECTION 14: TRANSPORT INFORMATION**

<b>DOT (Ground)</b>	This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.
<b>IMDG (Sea)</b>	Not Determined
<b>IATA (Air)</b>	Not Determined
<b>TDG (Canada)</b>	Not Determined

**SECTION 15: REGULATORY INFORMATION**

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

**SARA Title III Information:**

**Section 302 - Extremely hazardous substances:** None listed

**Section 311/312 – Hazard Categories:** Immediate (Acute)

**Section 313 –** The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

None listed

**CERCLA -** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

None listed

**EPA Registration Information:** This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**CAUTION**

Harmful if swallowed, absorbed through skin or inhaled.

Avoid breathing vapor or spray mist.

Wash thoroughly with soap and water after handling.

Remove contaminated clothing and wash before reuse.

**California Proposition 65:** This product does not contain chemicals known to the state of California to cause cancer and/or reproductive harm.

**U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):**

**Chemical Name**

**CAS #**

**State(s)**

No components listed

**Canadian Domestic Substances List:** Not determined

**WHMIS Classification:** This product is not approved for use in Canada. WHMIS Classification is not determined.

**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.

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