MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:
ALBAUGH, INC.
ANKENY, IA 50021

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : **IMIDASTAR 2L T&O**
CHEMICAL NAME : 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinime
CHEMICAL FAMILY : Chloronicotinyl insecticide
PRODUCT CODE : EPA Reg. No. 42750-115

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Imidacloprid	21.4	138261-41-3	Not estab.	Not estab.

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

HEALTH HAZARDS: Mildly irritating to the eyes and skin. May be harmful if swallowed.
PHYSICAL HAZARDS: Can decompose at high temperatures releasing toxic gases.
ENVIRONMENTAL HAZARDS: Extremely toxic to fish, water organisms and bees. Keep out of waterways.

SECTION 4 - FIRST AID MEASURES

IF SWALLOWED: Call physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.
IF IN EYES: Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.
IF ON SKIN: Remove contaminated clothing. Wash skin with plenty of soap and water. Get medical attention if irritation persists.
IF INHALED: Remove victim to fresh air. Get medical attention if symptoms develop.
NOTE TO PHYSICIAN: No specific antidote available, treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (method): > 100 C.
FLAMMABLE LIMITS (LFL-UFL): Unknown.
FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.
EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.
FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water run off.
FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece.
HAZARDOUS COMBUSTION PRODUCTS: Hydrogen cyanide, Hydrogen chloride, Carbon monoxide, Nitrogen oxides.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.
LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Minimize dust generation and accumulation.
STORAGE: Keep container closed when not in use. Keep away from food, feed and drinking water. Store in a well ventilated dry place away from heat.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3)
ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
PERSONAL PROTECTIVE EQUIPMENT:
EYE PROTECTION - Safety goggles
CLOTHING - Long-sleeved shirt and long pants, Chemical-resistant footwear plus socks
GLOVES - Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC), viton
RESPIRATOR – Not required when handled under normal conditions. When handling in enclosed areas with inadequate ventilation, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:
1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Off white viscous liquid
ODOR: No appreciable odor
BULK DENSITY: 1.08 g/ml
pH: 8.9
VAPOR PRESSURE: 1.5×10^{-9} mmHg @ 20C
WATER SOLUBILITY: Miscible.

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable, however may decompose if heated.
CONDITIONS TO AVOID: Avoid temperatures above 100°F (38°C) for prolonged period of time. Strong exothermal reaction can occur above 390°F (200°C)
INCOMPATIBILITY WITH OTHER MATERIALS: None known.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, Oxides of nitrogen and carbon.
HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD_{50} (rat)	- > 4,500 mg/Kg
Dermal LD_{50} (rat)	- > 2,000 mg/Kg
Inhalation LC_{50} (rat)	- > 5.0 mg/L
Eye Irritation (rabbit)	- Mild
Skin Irritation (rabbit)	- Slight
Sensitization (guinea pig)	- Non-sensitizer

CARCINOGEN STATUS:

OSHA	-	Not listed.
NTP	-	Not listed.
IARC	-	Not listed.

MUTAGENIC DATA: Little or no evidence of mutagenic effects during *in vivo* or *in vitro* studies.
ADDITIONAL DATA: No reproductive or teratogenic (birth defect) effects at normal exposure levels.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FISH TOXICITY: (Technical)
96 hour LC_{50}, Rainbow trout - 211 mg/L
96 hour LC_{50}, Bluegill - unknown

AVIAN TOXICITY: (Technical)
Oral LD_{50}, Bobwhite quail - 152 mg/Kg
Oral LD_{50}, Mallard duck - unknown

BEE TOXICITY:
Contact LD_{50} – Highly toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE: Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations.
CONTAINER: Non-refillable containers: Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers ≤5 gallons triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Refer to the container label to determine if it is refillable and for complete cleaning and disposal instructions.

SECTION 14 - TRANSPORT INFORMATION

DOT SHIPPING DESCRIPTION: Not regulated (all sizes)
DOT HAZARD CLASS: N/A
UN NUMBER: N/A
DOT PACKING GROUP: N/A
DOT PRIMARY/SECONDARY LABEL: N/A
DOT PRIMARY/SECONDARY PLACARD: N/A
DOT EMERGENCY RESPONSE GUIDE #: N/A

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: - No components listed
SARA TITLE III STATUS:
311/312 Hazard Categories - Immediate Health Hazard
313 Toxic Chemicals - None

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	1
	FLAMMABILITY	1
	PHYSICAL HAZARD	1
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

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REVISED DATE: October, 2012
REVISED FOR: Revised Section 12 and Section 13 to match current EPA approved label.