

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

Section 1—Chemical Product and Company Identification		
Product Name:	AgriSolutions™ Atrazine 90DF	EPA Reg. No. 9779-253
Common Name:	Triazine herbicide	
Chemical Description:	(2-chloro-4-ethylamino-6-isopropylamino-s-triazine)	
Manufacturer's Name: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	Medical Emergency Telephone Number: 1-877-424-7452 MSDS Revision Date: 06/01/2010 Supersedes document dated 09/07/07	

Section 2—Hazards Identification
<p>Emergency Overview: Grayish-tan fine granules with a slightly sweet odor. Irritating to eyes and respiratory system. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Can form flammable dust clouds in air. Product may cause oxygen deficiency in enclosed spaces; follow all OSHA regulations pertaining to confined space entry. See health effects below.</p> <p>CAUTION: Keep out of reach of children.</p> <p>Route(s) of Entry: Eyes, Inhalation, Skin, and Ingestion.</p>
<p>Health Hazards (Acute and Chronic):</p> <p>Inhalation: Inhalation of dust may cause irritation of the upper respiratory tract or labored breathing.</p> <p>Eyes: May cause irritation or redness.</p> <p>Skin: Contact may cause irritation. Prolonged or repeated exposure may lead to reddening of skin, rash, dermatitis, or other skin reactions.</p> <p>Ingestion: Harmful if swallowed. May cause gastric distress, lethargy, muscle weakness.</p>
<p>Medical Conditions Generally Aggravated by Exposure:</p> <p>Skin contact may aggravate preexisting skin conditions. Inhalation of dust or mists may aggravate preexisting respiratory conditions.</p>

Section 3—Composition Information on Ingredients		
Ingredient	% (wt)	CAS reg. #
Atrazine	>87.0%	1912-24-9
Related Triazines	<2.0%	-
Formulation aids*	10.0%	-

*Trade secret information as provided in 29 CFR 1910.1200(i)

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

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 Poison Control Center or doctor. Have the patient sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.
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: There is no specific antidote if this product is ingested. Treat symptomatically.	

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

Section 5—Fire and Explosion Hazard Data

Extinguishing Media: Foam, CO₂, dry chemical, water fog or spray for large fires

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components. If water is used, use a soft fog to avoid spreading contamination. Avoid exposure to smoke. Contain run-off by diking to prevent contamination of water supplies. The dust of this product may be a combustible powder, and can ignite, burn, and form explosive mixtures with air if not handled correctly. Mixtures of powder in air with flammable solvent vapors should be avoided. Eliminate the presence of mechanical sparks and other ignition sources where dust clouds of this material can form.

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: None known.

Section 6—Accidental Release Measures

Small Spills: Clean-up personnel should protect against dust inhalation and skin contact. Avoid generating dusts. Spills should be cleaned up immediately to prevent spreading. Clean spill area using a solution of water and detergent.

Large Spills: Clean-up personnel should protect against dust inhalation and skin contact. Avoid generating dust. Recover and contain as much product as possible.

Containment: Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. 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. Store in an area specifically designated for pesticides. Do not store in direct sunlight. Immediately clean up spills that occur during handling or storage. Protect from freezing. Keep containers closed when not in use. Do not reuse empty container. Do not generate dusts of this product.

Other Precautions: Consult Local, State, and Federal regulations pertaining to storage and disposal.

Section 8—Control Measures/Personal Protection

ACGIH TLV: Atrazine 5.0 mg/m³ (ACGIH TLV)

Respiratory Protection: Dust/mist filtering respirator or a NIOSH approved respirator with any N, R, P or HE filter if excessive dusting occurs. Seek professional advice prior to respirator selection and use.

Ventilation: **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.

Note to End Users: Refer to the product label for complete Personal Protective Equipment.

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.

Section 9—Physical/Chemical Characteristics

Physical State:	Solid, Fine granules	Bulk Density:	30 lbs./cu ft +/- 0.4 lbs
Vapor Pressure (mm Hg):	2.9 x 10 ⁽⁻⁷⁾ mmHg at 20 C for Atrazine	Melting Point:	Not determined
Vapor Density (Air=1):	Not applicable	Boiling Point:	Not applicable
Solubility in Water (wt %):	Disperses	pH:	Not determined
Appearance and odor:	Grayish-tan fine granules with a slightly sweet odor.	Autoignition temperature:	896° F

Section 10—Reactivity Data

Stability: Product is stable at room temperature in closed containers under normal storage and handling conditions.

Chemical Incompatibilities: Strong acids.

Conditions to Avoid: None known.

Hazardous Decomposition Products: Ammonia, hydrogen chloride, ethyl chloride, and carbon monoxide at high temperatures.

Hazardous Polymerization: Will not occur.

Section 11—Toxicological Information

Eye Effects:	Moderately irritating
Skin Effects:	Slightly irritating; Acute Dermal LD50 \geq 3100 mg/kg (rabbit)
Acute Inhalation Effects:	Not determined
Acute Oral Effects:	LD50 = 4346 mg/kg (rat)
Chronic Effects:	Cardiotoxicity in long-term study with high doses (dogs).
Mutagenicity:	Not determined
Teratogenicity:	Not determined
Carcinogenicity:	NTP, IARC OSHA: Not listed. Mammary tumors (female Sprague-Dawley rats), sex and strain specific for Atrazine. None observed for male Sprague-Dawley rats, F-344 rats or mice.

Section 12—Ecological Information

Soil Absorption/Mobility: Not persistent in soil profile. Atrazine has been found in groundwater. Atrazine can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table is close to the surface and where these soils are very permeable (i.e. well drained). See label for more detailed information.

Summary of effects: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Eco-acute toxicity: Green Algae 5-day EC50 = 49 ppb. Bird (mallard duck) LD50 Oral > 2000 mg/kg. Invertebrate (water flea) 48-hour EC50 = 6.9 ppm. Fish (rainbow trout) 96-hour LC50 = 4.5 ppm. Fish (bluegill sunfish) 96-hour LC50 = 6.7 ppm. Bird (bobwhite quail) 8-day dietary LC50 > 5000 ppm. Bird (mallard duck) 8-day dietary LC50 > 5000 ppm. Bee 48-hour LD50 > 97 ug/bee.

Eco-chronic toxicity: Invertebrate (water flea) 21-day LOEC 0.25 ppm. Bird (mallard duck) reproduction 23-week LOEL = 675 ppm. Fish (fathead minnow) 60-day LOEC = 0.87 ppm.

Environmental fate: Low bioaccumulation potential. Stable in water. Sinks in water after 24 hours.

Section 13—Disposal Considerations

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Completely empty bag into application equipment. Dispose of empty bag in accordance with applicable Federal, state and local laws and regulations.

RCRA characteristics: None

Section 14—Transport Information

Not regulated by the U.S. DOT as a hazardous material.

Section 15—Regulatory Information

TSCA Inventory: This product is exempt from listing requirements.

SARA Title III, Section 302: None listed

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

SARA Title III, Section 313: Atrazine (1912-24-9): >87.0%

CERCLA: None listed

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

Section 16—Other

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