SAFETY DATA SHEET
TREMOR ATZ NXT

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Tremor ATZ NXT
EPA Registration No.: 33270-24
Product Type: Herbicide
Active Ingredient: Acetochlor: 2-chloro-2'-methyl-6'-ethly-N-ethoxymethylacetanilide
Atrazine: 2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine
Manufacturer/Registrant: Winfield Solutions, LLC
P.O. Box 64589
St. Paul, MN 55164-0589
Non-Emergency Business Inquiries:1-855-494-6343 Mon – Fri 8am – 5pm (CST)

FOR MEDICAL EMERGENCIES: Contact 1-877-424-7452 for emergency medical treatment.
FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

THE FOLLOWING HAZARDS ARE IDENTIFIED ACCORDING TO OSHA HCS CLASSIFICATION (29 CFR 1910.1200).

Hazard Classifications:
Acute Oral Toxicity: Category 4
Skin Sensitization: Category 1
Specific Target Organ Toxicity: Category 3 (Single Exposure)
Specific Target Organ Toxicity: Category 2 (Oral – repeated exposure) **Signal Word:** WARNING **Pictograms:**

Hazard Statements:

- Harmful if swallowed
- May cause an allergic skin reaction - May cause respiratory irritation.
- May cause damage to organs through prolonged or repeated exposure if swallowed.

Precautionary Statements:

- Wash hand and face thoroughly after handling. Do not eat, drink or smoke when using this product. Is swallowed: immediately call a poison center or ad doctor. Do not induce vomiting. Store locked up.
- Avoid breathing dust, mist, vapor or spray. Use in a well-ventilated area. If inhaled, remove victim to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. Use only outdoors or in a well-ventilated area. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
- Wash hands and face thoroughly after handling. Wear protective gloves. If on skin: wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage and Disposal: See Section 7 and

13. **Other Hazards:** See Section 11 and 12.

SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	**CAS No.**	**Percentage (%) by Weight:**
Acetochlor	34256-82-1	33.4%
Atrazine	1912-24-9	26.9%
Furilazole	121776-33-8	≥ 1.3%
Other Ingredients	NA	22.0% – 38.4%

SECTION 4. FIRST AID MEASURES

If Swallowed: Call a poison control center or doctor immediately for treatment advice.
Do not give any liquid to the person.
Do not induce vomiting unless told to do so by the poison control center or doctor.
Do not give anything by mouth to an unconscious person.

If Inhaled: Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
Call a poison control center or doctor for further treatment advice.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes.
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes.
Sensitized persons should avoid further contact and reuse of contaminated clothing.
Call a poison control center or doctor for treatment advice.

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

Emergency Telephone Number:
(877) 424-7452 (Emergency Medical Treatment)
(800) 424-9300 CHEMTREC (transportation and spills)

Note to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, product container or label with you when calling a poison control center or doctor, or when going for treatment. Repeated excessive exposure may aggravate preexisting lung disease.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: 93.33ºC (>199.99ºF) (closed cup)

Flammable Limits (LFL & UFL): Not available **Extinguishing Media:** Use water fog, foam, fine spray, dry chemical or carbon dioxide. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. **Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. **Special Fire Fighting procedures:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimized property damage. Contain fire water run-off if possible. Firewater runoff, if not contained, may cause environmental damage. Review Section 6 and Section 12 of this SDS.

Fire Fighting Equipment: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment, Refer to Section 8, for additional information.
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See section 12, Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.
Contain spilled material if possible. Small spills: absorbed with materials such as clay, dirt or sand, then sweep up. Collect in suitable and properly labeled containers. Large spills: contact Chemtrec at 1-800-424-9300. See Section 13 for additional information.

SECTION 7. HANDLING AND STORAGE

HANDLING: Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. Use adequate ventilation.

STORAGE: Store in a dry place, locked up. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies. Do not store in mild steel, aluminum.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.
FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Eye and Face Protection: Wear safety goggles (with side shields). **Skin (Hand) Protection:** Wear gloves chemically resistant to this product. Examples of preferred gloves barrier materials include: chlorinated polyethylene. Neoprene, polyethylene. Ethyl vinyl alcohol laminate (EVAL). Examples of acceptable glove barrier materials include: butyl rubber, natural runner (latex), nitrile/butadiene rubber (nitrile or NBR), polyvinyl chloride (PVC or vinyl).

Other Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. **Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure

self-contained breathing apparatus. Effective types of air-purifying respirators: organic vapor cartridge with a particulate pre-filter.

Personal Protective Equipment (PPE): Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE.

If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users should:

- Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

Engineering Controls: Refer to product label. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations. **Exposure Limits:**

Chemical Name	CAS NO.	ACGIH/TLV	OSHA/PEL	Other
Atrazine	1912-24-9	2 mg/m^3 (TWA) (Inhalable fraction)	5 mg/m^3 (TWA)	Not Established

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pink suspension

Odor: Slight

Odor Threshold: No data available **pH:** 7.0 – 8.5

Flash Point: 93.33^{o}C (>199.99^{o}F) (closed cup)

Flammability: Not available

Density: 1.11 (water = 1)

Water Solubility: emulsifies

Kinematic Viscosity: Not applicable

Flammability (Solid, Gas): Not available

Upper/Lower Flammability/Explosive Limits: Not available

Auto-ignition Temperature: Not available

Explodability: Not available

Solubility: Not available

Partition Coefficient (n-Octanol/Water): Not available

Vapor Pressure: No volatile

Vapor Density: Not applicable

Freezing point: Not available

Boiling Point: Not available

Evaporation Rate: Not available

Decomposition Temperature: Not available

SECTION 10. STABILITY AND REACTIVITY STABILITY:

Stability: Stable under normal use and storage conditions.
Conditions and Materials to Avoid: Exposure to elevated temperatures can cause product to decompose. **Incompatibility:** Avoid contact with oxidizing materials. Avoid contact with metals such as aluminum, mild steel. **Hazardous Polymerization:** Will not occur.
Hazardous Decomposition Products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide, hydrogen chloride, nitrogen oxides. Gases can release during decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (End-Use Product)

Acute oral toxicity:	LD_{50} (rat) 1,338 mg/kg (female, rat)
Acute Dermal toxicity:	LD_{50} (rabbit): > 5,000 mg/kg
Acute inhalation toxicity:	LC_{50} (rat): No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). For similar materials(s): The LC50 value is greater than the Maximum Attainable Concentration. No deaths occurred at this concentration.
Eye irritation:	May cause slightly eye irritation. Corneal injury is unlikely.
Skin irritation:	Brief contact is essentially non-irritating to skin.
Skin Sensitization:	For similar material(s): Has caused allergic skin reactions when tested in guinea pigs.

Aspiration Hazard: Based on physical properties, not likely to be an aspiration hazard. **Toxicological Information:**

Acetochlor -

Chronic/Subchronic Toxicity: No data available.

Reproductive/Developmental Effects: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Mutagenicity: In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were predominantly negative.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Specific Target Organs Systemic Toxicity (Single Exposure): May cause respiratory irritation. **Specific Target Organ Systemic Toxicity (Repeated Exposure):** In animals, effects have been reported on the following organs: blood, central nervous system, kidney, liver, testes.

Carcinogenicity: Acetochlor caused cancer in some laboratory animals. Tumors were observed only at levels which produced significant toxicity, thus exceeding the maximum tolerated dose. EPA classified acetochlor as having ``Suggestive Evidence of Carcinogenic Potential'' but determined that the chronic risk assessment will be protective of both non-cancer and cancer effects. Therefore, a separate exposure assessment to evaluate cancer risk is unnecessary. **Atrazine -**

Chronic/Subchronic Toxicity: Cardiotoxicity in long term study with high doses (dogs).

Reproductive/Developmental Effects: None observed.

Mutagenicity: Atrazine showed mutagenic effects in laboratory experiments.

Carcinogenicity: Atrazine did not cause tumors in a mice study were given oral doses of 21.5 mg/kg/day from age 1 to 4 weeks followed by dietary doses of 82 mg/kg for an additional 17 months. Mammary tumors were observed in rats after lifetime administration of atrazine. EPA has classified atrazine as a possible human carcinogen because it has caused cancer in rats receiving high doses over the course of their lifetimes.

Target Organs: Heart

Aspiratory Hazard: Not classified

Carcinogenicity Assessment:
ACGIH: None
NTP : None
IARC : Group 3: Not classifiable as to its carcinogenicity to humans OSHA : None

Furilazole -
Acute Inhalation Toxicity: Prolonged excessive exposure to dust may cause adverse effects. LC_{50} (rat, m/f, 4-hrs, dust/mist); > 2.3 mg/L. Noe deaths occurred at this concentration.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Hazards: This product is toxic to fish and 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. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply Atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well drained. 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 groundwater is shallow, may results in groundwater contamination. Acetochlor has properties that may results in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion. Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

Ecotoxicity Information:

Acetochlor -

Aquatic Toxicity:

Rainbow Trout LC_{50} (flow-through, 96-h): 0.36 mg/L: NOEC: 0.13 mg/L
Daphnia magna (48-h) EC_{50} : 8.6 mg/L; NOEC (21-d) 0.0221 mg/L
Eastern oyster (flow-through test, 96-h) EC_{50} : 4.2 mg/L
Green algae EyC_{50} (96-h, growth inhibition): 0.00027 mg/L
Duckweed EyC_{50} (7-d, growth inhibition): 0.0027

mg/L **Avian Toxicity:**

Bobwhite quail LD_{50}: 928 mg/kg; LC_{50} (dietary, 5-day) >5,620 mg/kg (diet) Mallard duck (dietary, 5-day) LC_{50} : > 5,620 mg/Kg

Bee Toxicity: Oral (48-h) LD_{50} : > 100 µg/bee; contact LD_{50} : > 200 µg/bee

Earthworms Toxicity LC_{50} (14-d): 105.5 mg/kg

Environmental Fate: Stable in water. Half-line in the atmospheric is 2.3 hours. Bioconcentration potential is low (BCF < 100 or Log Pow < 3) BCF is 20. Potential for mobility in soil is medium (Koc between 150 and 500).

Atrazine -
Aquatic Toxicity: (Atrazine)
Rainbow Trout LC50 – 9.9 mg/L
Bluegill Sunfish LC50 – 54.5 mg/L
Water flea EC50 (static test, 48-hr): 5.29 mg/L
Algae ErC50: 0.147 mg/L

Avian Toxicity: (Atrazine)
Bobwhite quail Oral LD50:
>5,000 mg/kg Mallard duck: >
5,000 mg/Kg **Bee Toxicity:**

LD_{50} : > 97 µg/bee (oral); > 100 µg/bee (contact)

Earthworms Toxicity LC_{50} (14-d): 78 mg/kg **Environmental Fate:** Atrazine is moderately to highly mobile in soils. It does not absorb strongly to soil particles and has a lengthy soil half-life, it is expected to have a high potential for groundwater contamination, even though it is only moderately soluble I water.

Bioaccumulative Potential: Atrazine BCF (fish): 7.7 – 15 (Log Pow 2.59 @
20^{o}C) **Furilazole -**

Aquatic Toxicity:

Rainbow Trout LC_{50} (flow-through, 96-h): 6.2 mg/L
Bluegill sunfish LC_{50} (static test, 96-h): 4.6 mg/L
Daphnia magna (static test, 48-h) EC_{50} : 26 mg/L
Eastern oyster (flow-through test, 96-h) EC_{50} : 4.2 mg/L
Fresh water algae ErC_{50} (72-h, static test, growth rate inhibition): 85.2 mg/L; NOEC
12.5 mg/L **Avian Toxicity:**

Bobwhite quail LD_{50}: > 2,0000 mg/kg; LC_{50} (dietary, 5-day) >5,620 mg/kg (diet)
Mallard duck (dietary, 5-day) LC_{50} : > 5,620 mg/Kg **Environmental Fate:** Persistent in the environment. Bioaccumulation potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is high (Koc between 50 and 150).

Other Compounds -
No relevant data found.

SECTION 13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

Container Disposal: Refer to product label for container disposal. Dispose of product containers, waste containers, and residues according to local, state and federal health and environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT:

Not regulated

IMDG/IMO

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Acetochlor, Atrazine)
UN Number: UN 3082
Class: 9
Packing Group: III
Marine Pollutant: Acetochlor, Atrazine

ICAO/IATA

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Acetochlor, Atrazine)
UN Number: UN 3082
Class: 9
Packing Group: III

SECTION 15. REGULATORY INFORMATION

FIFRA 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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label. **CAUTION** Harmful if swallowed or inhaled. Causes moderate eye irritation. May cause allergic skin reaction. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. **SARA 311/212 Hazard Categories:**

Section 311/312 Acute Health Hazard
Chronic Health Hazard
Section 313 Chemical(s) Atrazine (CAS No. 1912-24-9)

CERCLA/SARA 302 Reportable Quantity (RQ): None

RCRA Hazardous Waste Classification (40 CFR 261): Not applicable

TSCA List: The ingredients of this product are listed on the TSCA inventory or are exempt.

CA Proposition 65:

This product contains chemical, Acetochlor (CAS No. 34256-82-1), known to the state of California to cause cancer. **State Right-to-Know:**

Acetochlor (CAS No. 34256-82-1): PA, NJ

Atrazine (CAS No. 1912-24-9): PA, NJ

SECTION 16. OTHER INFORMATION

SDS DATE: 3-9-2018 Converted to Winfield Solutions. Supersedes version: 1-27-2016

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions