

SAFETY DATA SHEET

LESCO® MOMENTUM® FX² HERBICIDE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LESCO® MOMENTUM® FX² HERBICIDE
EPA Reg. No.: 228-447-10404
Product Type: Herbicide

Company Name: Lesco Inc.
 1385 East 36th Street
 Cleveland, OH 44114-4114
 800-347-4272

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
 Call CHEMTREC Day or Night: 1-800-424-9300
 For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

HEALTH HAZARDS:

Serious eye damage	Category 1
Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 4
Specific target organ toxicity – Repeated exposure	Category 2

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute	Category 1
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SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Causes serious eye damage. Harmful if swallowed or inhaled. May cause damage to organs (liver, kidneys) through prolonged or repeated exposure. Very toxic to aquatic life.

**PRECAUTIONARY STATEMENTS**

Wear eye protection/face protection. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor for treatment advice.

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Dispose of contents and container in accordance with local/regional/national/international regulations.

Avoid breathing dusts/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove victim to fresh air and keep comfortable for breathing. Call a poison center/doctor for further treatment advice or if you feel unwell.

Do not breathe dusts/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If exposed or concerned: Call a poison center/doctor for further treatment advice. Store locked up. Dispose of contents and container in accordance with local/regional/national/international regulations.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical

advice/attention. Store locked up. Dispose of contents and container in accordance with local/regional/national/international regulations.

Avoid release to the environment. Collect spillage. Dispose of contents and container in accordance with local/regional/national/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Triisopropanolamine Salt of 2,4-Dichlorophenoxyacetic Acid	32341-80-3	43.0 – 45.5
1-Methylheptyl Ester of Fluroxypyr	81406-37-3	4.0 – 4.4
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid	57213-69-1	3.7 – 4.0
Other Ingredients	Trade Secret	Trade Secret

Synonyms: Mixture of 2,4-D, Triclopyr and Fluroxypyr

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

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

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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 on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

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

Most Important symptoms/effects, acute and delayed: Severe Eye Irritation.

Indication of Immediate medical attention and special treatment if needed: For ingestion there is no specific antidote available. Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillates. Avoid treatment which may result in aspiration. Treat symptomatically. Seek immediate medical attention for eye exposure.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

HANDLING:

Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. 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.

STORAGE:

Always store pesticides in a secured warehouse or storage building. Do not store near open containers of herbicides and other pesticides, fertilizer and seed. Store at temperatures above 25° F. Protect product from freezing. If allowed to freeze, remix well before using. This does not alter the product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticides. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear face shield, goggles or safety glasses with front, brow and temple protection. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt, long pants, shoes and socks. When applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment or otherwise exposed to the concentrate also wear chemical-resistant gloves. When mixing or loading, cleaning up spills or equipment or otherwise expose to the concentrate also wear a chemical-resistant apron. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Triisopropylamine salt of 2,4-D	10*	NE	10*	NE	mg/m ³
1-Methylheptyl Ester of Fluroxypyr	NE	NE	NE	NE	
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid	NE	NE	NE	NE	
Other Ingredients	N/A	N/A	N/A	N/A	

*Based on adopted limit for 2,4-D

NE = Not Established
N/A= Not Applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber colored liquid
Odor:	Slight amine-like odor
Odor threshold:	No data available
pH:	6.7 (1% solution)
Melting point/freezing point:	No data available
Initial boiling point and boiling range	No data available
Flash point:	>230° F (>110° C) Setflash

Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	1.172 g/ml @ 25° C
Solubility(ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	142.1 cPs @ 25° C

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact

Symptoms of Exposure: Severe eye irritation, Mild/slight skin irritation

Delayed, immediate and chronic effects of exposure: Causes serious eye damage. May cause damage to organs (liver, kidneys) through prolonged or repeated exposure. If ingested or inhaled, may cause headache, dizziness, nausea, vomiting, gastrointestinal irritation, weakness and central nervous system depression. The petroleum hydrocarbon component, if aspirated into the respiratory system during ingestion or vomiting may cause aspiration pneumonia.

Toxicological Data:

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD₅₀: 1,750 mg/kg (female) (estimated based on mortalities for doses tested)

Dermal: Rat LD₅₀: >5,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: >2.06 mg/L

Eye Irritation: Rabbit: Severely irritating/corrosive

Skin Irritation: Rabbit: Slightly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods. Repeated overexposure to Fluroxypyr may cause effects to bone marrow, kidney, liver and respiratory tract. Excessive exposure to Triclopyr may affect heart, kidneys and liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to phenoxy herbicides can cause liver, kidney and muscle damage. The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, more current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic potential. The U.S. EPA has given 2,4-D a Class D classification (not classifiable as to human carcinogenicity). Fluroxypyr did not cause cancer in laboratory animals. Triclopyr did not cause cancer in laboratory studies.

Reproductive Toxicity: No impairment of reproductive function attributable to 2,4-D has been noted in laboratory animal studies. In animal studies, fluroxypyr has been shown not to interfere with reproduction. For triclopyr in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: Studies in laboratory animals with 2,4-D have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Fluroxypyr did not cause birth defects in

animals; other effects were seen in the fetus only at doses which caused toxic effects in the mother. Triclopyr did not cause birth defects in laboratory animals.

Genotoxicity: There have been some positive and some negative studies, but the weight of evidence is that 2,4-D is not mutagenic. Animal tests with fluroxypyr did not demonstrate mutagenic effects. For triclopyr, *in-vitro* and animal mutagenicity studies were negative.

Assessment Carcinogenicity:

This product contains substances that are considered to be probable or suspected human carcinogens as follows:

Component	Regulatory Agency Listing As Carcinogen			
	ACGIH	IARC	NTP	OSHA
Chlorophenoxy Herbicides (2,4-D)	No	2B	No	No
1-Methylheptyl Ester of Fluroxypyr	No	No	No	No
Triethylamine Salt of 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid	No	No	No	No
Other Ingredients	No	No	No	No

12. ECOLOGICAL INFORMATION

Environmental Hazards:

This product may be toxic to fish and aquatic invertebrates. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Ecotoxicity:

Data on TIPA Salt of 2,4-D Acid:

Bluegill Acute LC ₅₀ :	432 mg/l	Pink Shrimp Acute LC ₅₀ :	744 mg/l
Rainbow Trout Acute LC ₅₀ :	317 mg/l	Tidewater Silverside Acute LC ₅₀ :	376 mg/l
Daphnia Acute LC ₅₀ :	748 mg/l	Growth Inhibition EC ₅₀ Green Algae:	103 mg/l

Data on Triclopyr TEA (64.7%):

96-hour LC ₅₀ Bluegill:	893 ppm	Bobwhite Quail 8-day Dietary LC ₅₀ :	>10,000 ppm
96-hour LC ₅₀ Rainbow Trout:	613 ppm	Mallard Duck Oral LD ₅₀ :	2,055 mg/kg
48 hour EC ₅₀ Daphnia:	947 ppm	Mallard Duck 8-day Dietary LC ₅₀ :	>10,000 ppm

Data on Fluroxypyr 1-Methylheptyl Ester:

Fluroxypyr 1-Methylheptyl Ester is highly toxic to aquatic invertebrates on an acute basis (LC₅₀ or EC₅₀ is between 0.1 and 1 mg/L). Concentrations for fish were not determined because they exceed water solubility. Fluroxypyr 1-Methylheptyl Ester is highly insoluble in water. Fluroxypyr 1-Methylheptyl Ester is practically non-toxic to birds on an acute and dietary basis (LD₅₀ >2,000 mg/kg and LC₅₀ >5,000 ppm).

Environmental Fate:

In laboratory and field studies, TIPA salt of 2,4-D acid salt rapidly dissociated to parent acid in the environment. The typical half-life of the resultant 2,4-D acid ranged from a few days to a few weeks. In laboratory and field studies, Triclopyr TEA rapidly dissociates to parent acid in the environment. Triclopyr is moderately persistent and mobile. In soil, the predominant degradation pathway is microbial and the average half-life is 30 days. Half-lives tend to be shorter in warm, moist soils with a high organic content. The predominant degradation pathway for triclopyr in water is photodegradation and the average half-life is one day. In laboratory and field studies, Fluroxypyr 1-Methylheptyl Ester rapidly de-esterified to parent acid in the environment. The typical soil half-life for fluroxypyr (acid and ester) ranged from one to four weeks. Microbial metabolism is the primary degradation mechanism in soil. The typical aquatic half-life ranged from 4 to 14 days.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Pesticide wastes may be acutely hazardous. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling and Disposal:

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **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 1/4 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

OR

Refillable Container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT:

< 39 gallons per completed package

Non Regulated

≥ 39 gallons per completed package

UN 3082, Environmentally hazardous substance, liquid, n.o.s., (2,4-D salt), 9, III, RQ, (2,4-D salt)

IMDG:

Non Regulated

IATA:

Non Regulated

15. REGULATORY INFORMATION**EPA FIFRA INFORMATION**

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

DANGER. Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370.66):

Immediate and Delayed

Section 313 Toxic Chemical(s):

Triisopropylamine salt of 2,4-D expressed as Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7), 23.70% equivalent by weight in product

Triclopyr Triethylammonium Salt (CAS No. 57213-69-1), 3.86% by weight in product

Reportable Quantity (RQ) under U.S. CERCLA:

Acetic Acid, (2,4-Dichlorophenoxy)- (CAS No. 94-75-7) 100 pounds

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: None known.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 3 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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Supersedes:

October 31, 2014

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