SAFETY DATA SHEET

DREXEL ME-TOO-LACHLOR™ MTZ

SECTION 1: MATERIAL IDENTIFICATION

Product Name: **Drexel Me-Too-Lachlor ™ MTZ**
EPA Reg. No.: 19713-704
Product Usage: Herbicide

Manufacturer: Drexel Chemical Company
Address: 1700 Channel Avenue
PO Box 13327
Memphis, Tennessee, 38113-0327, USA
901-774-4370

Emergency Telephone Numbers:

CHEMTREC	800-424-9300
DREXEL CHEMICAL COMPANY	901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the 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 Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Refer to SECTION 15: REGULATORY INFORMATION for explanation.

SECTION 2: HAZARD IDENTIFICATION

(As defined by the OSHA Hazard Communication Standard, 29)

Label Elements:
Signal Word:

DANGER

Classifications:

Hazard Class:

Toxicity Study:	Category:
Acute Toxicity, Oral	Category 4
Serious eye damage / Irritation	Category 2B
Specific Target Organs: Repeated	Category 2
Specific Target Organs : Drowsiness	Category 3
Specific Target Organs : Respiratory	Category 3
Carcinogenicity	Category 1B
Aspiration Liquid	Category 1
Flammable Liquid	Category 4

Hazard Statements:

H Code:	Statement:
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H320	Causes eye Irritation
H335	May cause respiratory irritation
H336	May cause drowsiness and dizziness
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure

HNOC (Hazard not otherwise classified): None available / Not applicable

Precautionary Statements:

Prevention:

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Obtain special instructions before use.
Read label before use.
Keep container tightly closed.
Keep only in original container.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Do not get in eyes, on skin, or on clothing.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release into the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
In case of inadequate ventilation, wear respiratory protection.

Response:

If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get immediate medical advice/attention.

If Swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. Treat symptomatically.

If Inhaled: Remove person to fresh air and keep comfortable for breathing. Call POISON CENTER or doctor if you feel unwell.

If on Skin or Clothing: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

If exposed or concerned: None available, get medical attention.

Material released or spilled: Collect spillage

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a cool, dry, and secure area designated specifically for pesticides and away from heat sources. Always use oldest stock first.

Disposal: Dispose of contents/container in accordance with your local or area regulatory authorities.

Specific hazards: In Case of Fire: Use dry chemical, CO_2 or foam for extinction.

SECTION 3: COMPOSITION INFORMATION

Chemical Name:	Synonym:	CAS No.:	EC No.:	RTECS:	% By Wt.:
Active Ingredient:					
Metolachlor	2-chloro-N-(2-ethyl-6-methylphenyl)-N-(1-methoxypropan-2-yl)acetamide	51218-45-2	257-060-8	AN3430000	58.2%
Metribuzin	4-amino-6-tert-butyl-3-methylsulfanyl-1,2,4-triazin-5-one	21087-64-9	244-209-7	XZ2990000	13.8%
Inert Ingredients:	N/A	N/A	N/A	N/A	28.0%

SECTION 4: FIRST-AID MEASURES

Have the product container, label and / or Safety Data Sheets (SDS) with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.

Eye Contact:	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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Skin/Clothing Contact:	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 mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Indication of Medical Attention and Special Treatment Needed:	Eye irritation, Drowsiness or dizziness, Respiratory irritation/ Treat symptomatically. If medical advice is needed, have product container or label at hand.
Note to Physician / Important Symptoms/ Effects, Acute and or Delayed:	None / Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Fire Fighting Media:	Use dry chemical, foam or CO_2 extinguishing media.
Fire Fighting Procedures:	Wear self-contained breathing apparatus with full protective clothing. Evacuate area and fight fire from a safe distance. Minimize the amount of water used for firefighting. Equipment should be completely decontaminated after use.
Special Protective Equipment for Firefighters:	Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.
Specific Fire Hazards:	Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back. Flammability classification (OSHA 29 CFR 1910.1200): Combustible Flash point: 184°F Lower flammable limit (% by volume): N/A Upper flammable limit (% by volume): N/A
Hazardous Combustion Products:	Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

National Fire Protection Association:

NFPA:	Health	Fire	Reactivity
	2	2	0

Ratings: **4-Extreme** **3-High** **2-Moderate** **1-Slight** **0-Insignificant**

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to SECTION 7: HANDLING AND STORAGE, for additional precautionary measures. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION.

Environmental Precautions:

Do not flush into surface water or sanitary sewer system. Prevent from entering soil, ditches, sewers, waterways and/or groundwater. Refer to SECTION 12: ECOLOGICAL INFORMATION.

Steps to be taken if Material is Released or Spilled:

Control the spill at its source.

Small spills: Stop the flow of material, if this is without risk. Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers. Should be damped-off and pumped into containers. Soak up remainder with absorbent material and dispose of in accordance with local regulations. Prevent entry into waterways, sewers, basements or confined areas.

Large spills: Stop the flow of material, if this is without risk. Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers. Should be damped-off and pumped into containers. Soak up remainder with absorbent material and dispose of in accordance with local regulations. Prevent entry into waterways, sewers, basements or confined areas. Contact Drexel Chemical Company for clean-up assistance. Refer to SECTION 13: DISPOSAL CONSIDERATIONS, for additional information. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7: HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN

Handling: **General Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not swallow. Avoid breathing dust. Avoid breathing vapors. Do not eat, drink or smoke when using this product. Use with adequate ventilation. Wear chemical protective equipment when handling. Wear long-sleeved shirt, long pants and shoes with socks when handling. Keep away from heat, sparks and flame. Do not reuse this container. Refer to SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION.

Storage: Store in a cool, dry, ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Keep away from unauthorized access. Do not store below 0^0C temperature. Do not store near children, food, foodstuffs, drugs or potable water supplies. Always use oldest stock first.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Components:	OSHA PEL	ACGIH TLV	OTHER
Metolachlor	N/A	N/A	N/A
Metribuzin	5 mg/m³ (vacated)	5 mg/m³	N/A

THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Engineering Controls:

Ventilation: Investigate engineering techniques to reduce exposures. When handling this product proper ventilation is required to maintain exposure below the TLV. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility / station and safety shower. Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Personal Protection:

Eye/Face Protection: Eye contact should be avoided through the use of chemical safety glasses, goggles or a face shield selected in regard to exposure potential. Wear chemical splash goggles to prevent vapors or mists from entering the eyes. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face thoroughly with soap and water before smoking or eating. Avoid getting wash water in eyes.

Hand Protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Viton, Polyvinyl chloride ("PVC" or "vinyl"). The selection of gloves for a particular application and duration of use in the workplace should also be taken into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to gloves materials, as well as the instructions / specs provided by the supplier of gloves.

Skin 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. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

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. When handling in enclosed areas, when large quantities of dusts are generated or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Reported Value
Physical State	Liquid
Appearance / Color	Clear / Amber
Odor	Aromatic sulfur-like
Odor threshold	Not available
pH	5 - 7
Freezing point	<5°F
Boiling point	Not available
Flash point	184°F
Evaporation rate	Not available
Flammability	Combustible
Upper flammability/explosive limits	Not available
Lower flammability/explosive limits	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	8.91 lbs. / gal.
Solubility in water	Emulsifies
Solubility in organic solvents	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	734°F
Decomposition temperature	Not available
Viscosity	25cP
Explosive properties	Not available
Oxidizing properties	Not available
Dissociation Constant	Not available

Property Note: The physical properties and reported values are typical values based on materials tested but may vary from sample to sample. Thus, typical values should not be construed as a guaranteed analysis of any specific lot/ batch or specification items.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Not reactive. Thermally stable at typical use temperatures and in closed containers.
Chemical Stability:	Stable under recommended storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Elevated temperatures.
Incompatible Materials:	Oxidizing agents.
Hazardous Decomposition Products:	None known, but may produce or discharge toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:

Potential routes of exposure/potential health effects:		Dermal, Inhalation
Acute Oral:	**LD_{50} (Rat):**	1805 mg/kg (body weight)
Acute Dermal:	**LD_{50} (Rat):**	> 5000 mg/kg (body weight)
Acute Inhalation:	**LC_{50} (Rat):**	> 2.53 mg/L air - 4 hours
Eye Irritation:	**(Rabbit):**	Moderately Irritating
Skin Irritation:	**(Rabbit):**	Slightly Irritating
Skin Sensitization:	**(Guinea Pig):**	Not a Sensitizer

Chronic Toxicity:	Metolachlor Metribuzin	No adverse effect has been observed in chronic toxicity tests. Dog and rat feeding studies showed decreases in body weight and food consumption, anemia, liver effects, kidney effects, testicular effects and mortality. A dermal toxicity study in rabbits showed effects on cholesterol levels and liver function. A rat inhalation study showed behavioral changes, decreased body weight gains, liver enzyme induction and organ weight effects. Neurotoxicity: Animal studies showed evidence of transient neurobehavioral effects after single oral dosing at 5 mg/kg and above. Other screening studies showed no evidence of neurotoxicity at dietary concentrations up to 900 ppm.
Carcinogenicity:	Metolachlor Metribuzin	Did not show carcinogenic effects in animal experiments. Metribuzin was investigated for carcinogenicity in chronic feeding studies using rats and mice at maximum levels of 900 and 3200 ppm, respectively. There was no evidence of a carcinogenic potential observed in either species. None listed in OSHA, NTP, or IARC. ACGIH lists Metribuzin as TLV-A4: Not Classifiable as a Human Carcinogen. EPA lists Metribuzin as EPA-D: Not Classifiable as to Human Carcinogenicity.
Mutagenicity:	Metolachlor Metribuzin	No data available
Teratogenicity:	Metolachlor Metribuzin	No data available
Reproductive Toxicity:	Metolachlor Metribuzin	Did not show reproductive effects in animal experiments. Reproductive toxicity shown in a two-generation study in rats only at dose levels toxic to the parent animals. This reproductive toxicity is related to parental toxicity.
Developmental Toxicity:	Metolachlor Metribuzin	Did not show reproductive effects in animal experiments. Developmental effects seen only at dose levels toxic to the dams. The developmental effects seen are related to maternal toxicity.
Other Hazards Effects:	No data available	

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

Metolachlor	The information presented here is for the active ingredient. Low bioaccumulation potential. Not persistent in soil. Stable in water. Sinks in water (after 24 h).
Metribuzin	The information presented below is for the active ingredient, Metribuzin. Not persistent in soil. Stable in water. Moderate mobility in soil. Sinks in water (after 24 h).

ECO-ACUTE TOXICITY

Aquatic Toxicity:	**Rainbow Trout, LC_{50}, 96-hr**	Metolachlor Metribuzin	1.23 mg/L 42 ppm
	Daphnia magna, 48 hour, EC_{50}	Metolachlor Metribuzin	11.24 mg/L 4.18 ppm
	Green Algae 96-hour ErC_{50}	Metolachlor	0.077 mg/L

		Metribuzin	20.8 ppb
Arthropod Toxicity:	**Bees, Acute LD_{50}**	Metolachlor Metribuzin	No data available
Bird Toxicity:	**Mallard Duck , LD_{50}**	Metolachlor Metribuzin	No data available
	Bobwhite Quail, LD_{50}	Metolachlor Metribuzin	>10,000 ppm 164 mg/kg

Persistence and degradability:	Metolachlor	Not persistent in soil. Stable in water. Sinks in water (after 24 h).
	Metribuzin	Not persistent in soil. Stable in water. Sinks in water (after 24 h).
Bioaccumulation:	Metolachlor	Low bioaccumulation potential.
	Metribuzin	Not persistent in soil. Stable in water. Moderate mobility in soil. Sinks in water (after 24 h).
Mobility in soil:	Metolachlor	Not persistent in soil.
	Metribuzin	Moderate mobility in soil.
Other adverse effects:	Do not contaminate water supplies, lakes, streams, ponds or drains with this product.	

SECTION 13: DISPOSAL CONSIDERATIONS

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: TRANSPORT INFORMATION

DOT:	**Packages ≤119 gallons**	Not Regulated
	Packages >119 gallons	NA1993, Combustible Liquid, N.O.S., (Metolachlor/ Metribuzin) 3, PG-III.

UN Identification No.:	NA1993
Proper Shipping Name:	Combustible Liquid, N.O.S., (Metolachlor/ Metribuzin)
Hazard Class:	3
Packing Group:	III
Reportable Quantity:	Not listed
Environmental Hazard:	Not listed/ Not applicable
Freight Description:	Agricultural Herbicide, Liquid, N.O.S.
ERG Guide No.:	171
Transport Information Note:	

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

IMDG:	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (METOLACHLOR/ METRIBUZIN), 9, PG-III, MARINE POLLUTANT
ICOA / IATA:	UN 3082, Environmentally Hazardous Substances, Liquid, N.O.S. (Metolachlor /Metribuzin), 9, PG-III
UN Identification No.:	UN3082
Proper Shipping Name:	Environmentally Hazardous Substances, Liquid, N.O.S. (Metolachlor /Metribuzin)
Hazard Class:	9
Packing Group:	III
Reportable Quantity:	Not listed/ Not applicable
Environmental Hazard:	Marine Pollutant
Freight Description:	Agricultural Herbicide, Liquid, N.O.S.
ERG Guide No.:	171
Transport Information Note:	

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Standard:	**This product contains hazardous components as defined under the criteria of the Federal OSHA Hazardous Communication Standard 29 CFR 1910.1200.**
Pesticide Registration:	This product is a pesticide registered by the Environmental Protection Agency (EPA) and is subject to certain FIFRA 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.
EPA Reg. No.:	19713-704
FIFRA Label Signal Word:	WARNING
FIFRA Label Information:	KEEP OUT OF REACH OF CHILDREN
FIFRA Label Information:	Hazards to Humans and Domestic Animals WARNING: Causes temporary but substantial eye injury. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

EPCRA SARA Title III Classification:

Section 302:	Extremely Hazardous Substance Notification:	No data available
Sections 311 and 312:	Immediate (Acute) Health Hazard:	Yes
	Delayed (Chronic) Health Hazard:	Yes
	Fire Hazard:	Yes
	Reactive Hazard:	No
	Sudden Release of Pressure Hazard:	No

Section 313 Toxic Release Inventory (TRI):	Metribuzin, (CAS No.: 21087-64-9), 13.8%
CERCLA/SARA 304 Reportable Quantity (RQ):	Not listed

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

US EPA Toxic Substances Control Act (TSCA): All ingredients are listed or exempt from listing on Chemical Substance Inventory.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

Metolachlor	Listed as causing:	Not listed
	Listing date:	Not listed
	Listing basis:	Not listed
Metribuzin	Listed as causing:	Not listed
	Listing date:	Not listed
	Listing basis:	Not listed

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Date Issued: March 30, 2021 **Date Supersedes:** August 13, 2020 **Revision:** 2

For all non-emergency questions about this product, please contact:
1700 Channel Avenue
PO Box 13327
Memphis, Tennessee 38113-0327, USA
Phone: 901-774-4370
Fax: 901-774-4666
Website: www.drexchem.com

Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.