

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**COMPANY ADDRESS:**

ALBAUGH, LLC
Ankeny, IA 50021

EMERGENCY TELEPHONE NUMBERS:

(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME

: **MesoCore**

CHEMICAL NAME

: Mesotrione
Clopyralid

PRODUCT USE

: Herbicide

PRODUCT CODE

: EPA Reg. No. 42750-342

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Tan viscous liquid

HEALTH HAZARDS: WARNING. Causes eye irritation.

PHYSICAL HAZARDS: May decompose at high temperatures forming noxious gases.

ENVIRONMENTAL HAZARDS: May be harmful to non-target plant species.

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER
Mesotrione	13.00	104206-82-8
Clopyralid Monoethanolamine (MEA)	10.85	57754-85-5
Other ingredients	76.15	n/a

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

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 IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 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 ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 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.

NOTE TO PHYSICIAN: No specific antidote available, treat symptomatically

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

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

FLASHPOINT: >200 F

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing possibly toxic gases. Flammable hydrogen gases may be formed on contact with incompatible metals such as mild steel or galvanized steel.

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 excessive water runoff.

FIRE FIGHTING EQUIPMENT: Full fire fighting turn-out gear with self-contained breathing apparatus.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: 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. Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

HANDLING: Use only in a well-ventilated area. Spray solutions should only be mixed or stored in plastic, stainless steel or fiberglass vessels. Concentrate must not be stored in long term contact with galvanized steel, carbon (mild) steel, aluminum, brass or cast iron.

STORAGE: KEEP FROM FREEZING. DO NOT store below 32°F. Store in a well ventilated area. Keep closed in original container when not in use. Keep away from food, feed and drinking water.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**EXPOSURE LIMITS (8 hour TWA, ppm):**

COMPONENT	OSHA PEL	ACIGH TLV
Mesotrione	Not listed	Not listed
Clopyralid Monoethanolamine (MEA)	Not listed	Not listed

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety glasses when working with concentrate.

CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks

GLOVES – Chemical resistant gloves made of any waterproof material.

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 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:

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Tan liquid
Odor:	Faint odor
pH:	3.0-3.5
Melting Point:	Not applicable
Boiling Point:	No data
Flash Point:	No data
Evaporation Rate:	No data
Flammability:	Not flammable
Flammability Limits:	Not applicable
Vapor Pressure:	No data
Vapor Density:	Not applicable
Density:	1.105 g/ml*
Solubility:	Miscible
Partition Coefficient:	No data
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	896.0 cSt @ 20.0°C / 283.0 cSt @ 40.0°C

*Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: None known.

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid storage or prolonged contact with galvanized steel, carbon steel, aluminum, brass or cast iron.

INCOMPATIBLE MATERIALS: Strong oxidizers. Do not mix or store in mild steel or aluminum containers. Avoid use with equipment using zinc, brass or copper components.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen and carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity values from a similar but not identical formulation.

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	- >5,000 mg/kg
Dermal LD ₅₀ (rat)	- >5,000 mg/kg
Inhalation LC ₅₀ (rat)	- >2.06 mg/L
Eye Irritation (rabbit)	- Mildly irritating
Skin Irritation (rabbit)	- Slightly irritating
Sensitization (guinea pig)	- Non-sensitizer

CARCINOGEN STATUS:

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

TERATOGENICITY: Not known to exhibit reproductive or teratogenic (birth defect) effects.

MUTAGENICITY: No evidence of mutagenic effects during in vivo or in vitro studies.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils that would allow direct introduction into an aquifer.

FATE: Clopyralid MEA salt disassociates to the parent acid rapidly in the environment and is moderately persistent in the soil with a half-life of 1 to 12 months depending on soil type and other conditions. Do not use plants treated with clopyralid for compost or mulch.

Mesotrione is moderately persistent with medium to high mobility potential in soil depending on soil type.

FISH TOXICITY: (Mesotrione)		FISH TOXICITY: (Acid Technical)	
96 hour LC ₅₀ , Rainbow trout -	> 120 mg/L	96 hour LC ₅₀ , Rainbow trout -	>100 mg/L
96 hour LC ₅₀ , Bluegill -	> 120 mg/L	96 hour LC ₅₀ , Bluegill -	>100 mg/L
AVIAN TOXICITY: (Mesotrione)		AVIAN TOXICITY: (Acid Technical)	
Oral LD ₅₀ , Bobwhite quail -	No data	Dietary LC ₅₀ , Bobwhite quail -	> 4,640 ppm
Oral LD ₅₀ , Mallard duck -	No data	Dietary LC ₅₀ , Mallard duck -	> 4,640 ppm
BEE TOXICITY: (Mesotrione)		BEE TOXICITY: (Clopyralid acid)	
Contact LD ₅₀ -	No data	Contact LD ₅₀ -	> 100 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

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. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Refillable container: Refill this container with mesotrione only. Do not reuse this container for any other purposes. Do not reuse this container for any other purpose.

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

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION: Not regulated by DOT
(Ground transport)

TRANSPORT HAZARD CLASS: N/A
UN NUMBER: N/A
DOT PACKING GROUP: PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: 3,200 gallons (Ethylene glycol RQ of 5,000 lbs)

SARA TITLE III STATUS:
311/312 Hazard Categories - Immediate health hazard
313 Toxic Chemicals - None listed

CALIFORNIA PROP 65 STATUS: Not listed

SECTION 16 - OTHER INFORMATION

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

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED 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-approved label.

REVISED DATE: July, 2019

REFERENCE: Initial release