

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: Tenkoz, Inc.
Alpharetta, GA 30005

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : Tenkoz MCPA ESTER 4
CHEMICAL NAME : Ethylhexyl ester of 2-Methyl-4-chlorophenoxyacetic acid (MCPA)
PRODUCT USE : Herbicide
PRODUCT CODE : EPA Reg. No 42750-23-55467

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

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

Clear amber liquid

HEALTH HAZARDS:

Harmful if swallowed, inhaled or absorbed through skin.

PHYSICAL HAZARDS:

May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS:

Toxic to some aquatic organisms.

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

COMPONENT	PERCENTAGE	CAS NUMBER
2-Ethylhexyl ester of MCPA	69.7 %	26544-20-7
Inert Ingredients	30.3 %	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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. 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 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 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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

FLASHPOINT: 108.5°C

EXTINGUISHING MEDIA: Water spray, Foam

FIRE AND EXPLOSION HAZARD: Thermal decomposition can produce toxic gasses.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes 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 environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

Minimize use of water to prevent environmental contamination

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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.

Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

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

HANDLING: Use only in a well-ventilated area. Do not reuse this container. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

STORAGE: Store in a dry location away from children, animals, foods, feeds, seeds and other agricultural chemicals. Keep container closed when not using. Do not allow water into container as this may cause deterioration of product. Keep storage area locked when not in use.

Do not use, pour, spill or store near heat or open flame.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm): .

COMPONENT	OSHA PEL	ACIGH TLV
2-Ethylhexyl ester of MCPA	Not listed	Not listed

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

PERSONAL PROTECTIVE EQUIPMENT: Mixers, loaders, applicators, flaggers and other handlers must wear:

EYE PROTECTION - Safety glasses, goggles or face shield.

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

GLOVES – Chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or viton.

Additional PPE requirements for mixers and loaders supporting aerial application to rangelands, pasture lands, or noncropland. These mixers/loaders also must wear:

A chemical resistant apron, and a NIOSH-approved respirator with a dist/mist filter with MSHA/NIOSH approval number prefix TC-21C or any N², R, P, or HE filter.

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:	Clear amber liquid
Odor:	fuel oil odor
pH:	3.1 – 4.1
Melting Point:	Not applicable
Boiling Point:	No data
Flash Point:	108.5°C
Evaporation Rate:	No data
Flammability:	Not flammable
Flammability Limits:	Not applicable
Vapor Pressure:	2.3 x 10 ⁻² mPa (20°C) (MCPA)
Vapor Density:	Not applicable
Density:	1.15 – 1.21 g/ml (9.6 – 10.1 lb/gl)*
Solubility:	Emulsifies
Partition Coefficient:	log Pow = 2.75 (pH 1), 0.46 (pH 5) (25°C) (MCPA)
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	10.798 cSt (20°C); 5.419 cSt (40°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 under normal conditions.

HAZARDOUS REACTION/POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Avoid excessive heat.

INCOMPATIBLE MATERIALS: Oxidizing agents and acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may release toxic gases such as hydrogen chloride, oxides of nitrogen and carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

Data from a similar but not identical formulation.

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	> 1,250 mg/Kg
Dermal LD ₅₀ (rat)	> 2,000 mg/Kg
Inhalation LC ₅₀ (rat)	> 1.0 mg/L
Eye Irritation (rabbit)	Moderately irritating
Skin Irritation (rabbit)	Moderately irritating
Sensitization (guinea pig)	Non-sensitizer

CARCINOGEN STATUS:

OSHA	- Not listed
NTP	- Not listed
IARC	- 2B (chlorophenoxy herbicides)

TERATOGENICITY: Limited evidence of developmental toxicity.

MUTAGENICITY: Weight of evidence indicates MCPA is not mutagenic.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide may be toxic to fish, aquatic invertebrates and aquatic plants. 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 or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FATE: MCPA EH ester rapidly de-esterifies to the parent acid in the environment. MCPA has a half-life of 10-14 days depending on soil type.

FISH TOXICITY: (Acid technical)

96 hour LC ₅₀ , Bluegill –	3.9 mg/L
96 hour LC ₅₀ , Rainbow trout –	3.2 mg/L

AVIAN TOXICITY: (DMAS)Dietary LC₅₀, Quail – > 5,000 ppmDietary LC₅₀, Mallard Duck - > 5,500 ppm**BEE TOXICITY:** (DMAS)

>15.0 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

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

WASTES: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture 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: 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 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.

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

SECTION 14 - TRANSPORT INFORMATION**SHIPPING DESCRIPTION:**

(Ground transport)

Not regulated by DOT

TRANSPORT HAZARD CLASS:

N/A

UN NUMBER:

N/A

DOT PACKING GROUP:

PG III

SECTION 15 - REGULATORY INFORMATION**CERCLA REPORTABLE QUANTITY:**

Not listed

SARA TITLE III STATUS:

311/312 Hazard Categories -

313 Toxic Chemicals -

Immediate & Delayed Health

None known

CALIFORNIA PROP 65:

Not listed.

TSCA:

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

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	2
	FLAMMABILITY	1
	PHYSICAL HAZARD	1
	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 Tenkoz' knowledge. Tenkoz 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: October, 2014

REVISED FOR: Revised for GHS compliance