

Material Safety Data Sheet

Tenkoz, Inc.
100 North Point Center East, Suite 330
Alpharetta, GA 30022

24 Hour Emergency Response Information:
CHEMTREC: (800) 424-9300
BASF Hotline: (800) 832-HELP

ESTABLISH ATZ™

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SECTION 1 - Substance/Preparation

Substance number: 000000063593
Molecular formula: C(12)H(18)Cl N O(2) S; C8 H14 Cl N5
Chemical family: carboxylic acid amide, halogenated
Synonyms: dimethenamid-P; atrazine (active ingredients)

SECTION 2 - Composition/Information on Ingredients

CAS Number	Content (W/W)	Chemical name
	41.74 %	Inert ingredients
1912-24-9	35.3 %	atrazine
163515-14-8	18.2 %	(S)-dimethenamid
107-21-1	4.5 %	ethylene glycol
91-20-3	0.18 %	naphthalene

SECTION 3 - Hazard Identification

Emergency overview

CAUTION: KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF SWALLOWED.
HARMFUL IF ABSORBED THROUGH SKIN.
May cause moderate but temporary irritation to the eyes.
Avoid contact with the skin, eyes and clothing.
May produce an allergic reaction.

Potential health effects

See Product Label for additional precautionary statements.

Primary routes of exposure

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute toxicity:

Slightly toxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Information on: Ethylene glycol

Acute overexposure can cause abdominal distress, CNS depression, and possibly respiratory and/or kidney failure

Information on: Petroleum Distillates with Naphthalene

Inhalation may cause headache, confusion, and excitement.

Inhalation may cause central nervous system depression (effects include headache, weakness, drowsiness, lightheadedness, vertigo, loss of consciousness), respiratory tract irritation, asphyxiation, cardiac stress and coma.

Ingestion may cause gastrointestinal irritation, nausea, vomiting, diarrhea, weakness, and dizziness.

Ingestion results in cramps, nausea, vomiting and diarrhea, listlessness, bladder irritation and brownish urine.

Aspiration may result in chemical pneumonitis, which may be fatal. Ingestion results in cramps, nausea, vomiting and diarrhea, listlessness, bladder irritation and brownish urine.

Inhalation may cause headache, confusion, and excitement.

Information on: Petroleum solvent

Inhalation of high vapor/aerosol concentrations are irritating to eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death.

Aspiration may result in chemical pneumonitis, which may be fatal.

Information on: Aromatic 200 Solvent

At high oral doses in rats, this component caused damage to the stomach, liver, thyroid and urinary bladder. These effects are not relevant to humans at occupational levels of exposure.

Irritation:

May cause moderate but temporary irritation to the eyes. May cause slight irritation to the skin.

Sensitization:

Caused skin sensitization in animal studies.

Repeated dose toxicity:**Information on: Ethylene glycol**

Chronic overexposure to ethylene glycol may lead to liver degeneration and severe kidney damage.

Animal studies indicate that ethylene glycol may be embryo toxic and teratogenic by the oral and inhalation routes. Ethylene glycol has been found to be noncarcinogenic in experimental animals.

Information on: Petroleum Distillates with Naphthalene

Overexposure may cause liver and kidney toxicity.

Exposure by ingestion or inhalation may cause hemolysis, anemia, fever, hemoglobinuria, and jaundice.

A National Toxicology Program (NTP) report states that a lifetime inhalation exposure produced nasal tumors in rats.

A National Toxicology Program (NTP) report states that a lifetime inhalation exposure produced lung tumors in female mice.

Medical conditions aggravated by overexposure:

No data available.

SECTION 4 - First-Aid Measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician

Hazards: Vomiting may cause aspiration pneumonia due to the ingredients. Because of the increased risk of chemical pneumonia or pulmonary edema caused by aspiration of the hydrocarbon solvent, vomiting should be induced only under professional supervision.

SECTION 5 - Fire-Fighting Measures

Flash point:

> 200 °F

(Unspecified)

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, Carbon dioxide, Nitrogen oxide, Hydrogen chloride, If product is heated above decomposition temperature, toxic vapors will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

NFPA Hazard codes:

Health : 2

Fire: 1

Reactivity: 0

Special:

SECTION 6 - Accidental Release Measures

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

SECTION 7 - Handling and Storage

Handling**General advice:**

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used up as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage**General advice:**

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage incompatibility:

General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

SECTION 8 - Exposure Controls and Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with workplace control parameters

atrazine

ACGIH TWA value 5 mg/m³;

ethylene glycol

ACGIH CLV 100 mg/m³ aerosol ;

naphthalene

OSHA PEL 10 ppm 50 mg/m³ ;
ACGIH TWA value 10 ppm ; STEL value 15 ppm ; Skin Designation ;

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment**RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:****Respiratory protection:**

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapors. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full face piece pressure demand self-contained breathing apparatus (SCBA) or a full face piece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

SECTION 9 - Physical and Chemical Properties

Form:	liquid
Odor:	moderate odor, sweetish
Color:	white to tan
pH value:	3.3
Density:	1.121 g/cm ³
Relative density:	1.121
Bulk density:	9.36 lb/USg

SECTION 10 - Stability and Reactivity**Conditions to avoid:**

No conditions known that should be avoided.

Substances to avoid:

strong oxidizing agents

Hazardous reactions:

The product is chemically stable.

Decomposition products:

Hazardous decomposition products: nitrogen oxides carbon monoxide, Carbon dioxide, Hydrogen chloride

Thermal decomposition:

Possible thermal decomposition products: carbon monoxide, Carbon dioxide, Nitrogen oxide, Hydrogen chloride. Stable at ambient temperature. If product is heated above decomposition temperature toxic vapors may be released. If product is heated above decomposition temperature hazardous fumes may be released.

Corrosion to metals:

No corrosive effect on metal.

SECTION 11 - Toxicological Information**Acute toxicity****Oral:**

LD50/rat: > 500 - < 2,000 mg/kg Moderately toxic.

Inhalation:

LC50/rat: > 2.2 mg/l / 4 h Moderately toxic.

Dermal:

LD50/rabbit: > 4,000 mg/kg Slightly toxic.

Skin irritation:

rabbit: Slightly irritating. (Primary skin irritation test)

Eye irritation :

rabbit: Moderately irritating.

Sensitization:

Skin sensitization test/guinea pig: Sensitizer
Sensitizer

Genetic toxicity:

Information on: dimethenamid-P

Information on: atrazine

No mutagenic effects reported.
-----**Carcinogenicity:**

Information on: dimethenamid-P

Information on: atrazine

The substance is not considered to pose a carcinogenic risk at low human exposure levels.
-----**Reproductive toxicity:**

Information on: dimethenamid-P

Information on: atrazine

The results of animal studies gave no indication of a fertility impairing effect.
-----**Developmental toxicity/teratogenicity:**

Information on: dimethenamid-P

Information on: atrazine
-----**SECTION 12 - Ecological Information**

Information on: dimethenamid-P

Information on: atrazine

Acute and prolonged toxicity to fish:

Rainbow trout/LC50 (96 h): 5.3 mg/l

sunfish, bluegill/LC50 (96 h): 42 mg/l

Information on: dimethenamid-P

Information on: atrazine

Acute toxicity to aquatic invertebrates:

Daphnia magna/EC50 (24 h): 87 mg/l

Mysid shrimp/EC50: 1 ppm

Information on: dimethenamid-P

Information on: atrazine

Toxicity to aquatic plants:

green algae/EC50 (96 h): 0.043 mg/l

algae/EC50: 49 ppb

Information on: dimethenamid-P

Information on: atrazine

Other terrestrial non-mammals:

bobwhite quail/LD50: 940 ppm

Honey bee: 96.69 ppm

mallard duck/LC50: > 5,000 ppm

SECTION 13 - Disposal Considerations**Waste disposal of substance:**

Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for

guidance.

Container disposal:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

SECTION 14 - Transport Information

Reference Bill of Lading

SECTION 15 - Regulatory Information**Federal Regulations****Registration status:**

TSCA, US released / exempt

OSHA hazard category: IARC 1, 2A or 2B carcinogen, NTP listed carcinogen, Chronic target organ effects reported, Acute target organ effects reported, ACGIH TLV established, Toxic - oral

CERCLA RQ	CAS Number	Chemical name
5,000 LBS	107-21-1	ethylene glycol
100 LBS	91-20-3; 630-20-6	naphthalene; Ethane, 1,1,1,2-tetrachloro-

SARA hazard categories (EPCRA 311/312): Acute, Chronic

SARA 313:

CAS Number	Chemical name
107-21-1	ethylene glycol
91-20-3	naphthalene

State regulations**State RTK**

CAS Number	Chemical name State RTK
91-20-3	naphthalene MA, NJ, PA

SECTION 16 - Other Information

Refer to product label for EPA registration number.

Recommended use: crop protection product

Local contact information

Product Stewardship

Tenkoz, Inc.
100 North Point Center East, Suite 330
Alpharetta, GA 30022
770-343-8509
www.Tenkoz.com

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