

Preparation Date 30-Aug-2022

Revision Number: 7

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Identification of the product

**Product Description** Acumen Microcap

### Other means of identification

**Product code** 12-230AA  
**UN/ID no** UN3082  
**Registration number(s)** 70506-230-55467

### Recommended use of the chemical and restrictions on use

**Recommended use** Pre-emergence weed control.  
**Uses advised against** Activities contrary to label recommendation

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

Tenkoz, Inc.  
1725 Windward Concourse  
Suite 410  
Alpharetta, GA 30005

#### Emergency telephone number

**Emergency telephone numbers** Chemtrec: (800) 424-9300 (24hrs)  
Medical: Rocky Mountain Poison and Drug Safety (866) 673-6671 (24hrs)

## 2. Hazards Identification

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 3
Skin sensitization	Category 1

### Label elements

#### EMERGENCY OVERVIEW

**DANGER**

#### Hazard Statements

Toxic if inhaled  
May cause an allergic skin reaction



<b>Appearance</b> yellow-orange	<b>Physical state</b> Liquid	<b>Odor</b> faint
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**Precautionary Statements - Prevention**

Do not get in eyes, on skin, or on clothing  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)****OTHER INFORMATION**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life
- May be harmful in contact with skin

### 3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine]	40487-42-1	38.7

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

### 4. First aid measures

**FIRST AID MEASURES**

**Eye contact** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin contact** Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Remove and wash contaminated clothing before re-use.

**Inhalation** 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 physician or poison control center immediately.

**Ingestion** Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Most Important Symptoms and Effects** No data available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** Treat symptomatically.

## 5. Fire-fighting measures

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** no data available.

### Specific hazards arising from the chemical

No information available.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Oxides of nitrogen. Hydrocarbons.

### Explosion data

### Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

### Environmental Precautions

**Environmental precautions** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

### Methods and material for containment and cleaning up

**Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

## 7. Handling and Storage

### Precautions for safe handling

**Handling** Pesticide applicator and workers must follow the label and Direction for Use in accordance with the EPA Worker's Protection Standard. For manufacturing, blending or packaging the following recommendations are provided: Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Do not eat, drink or smoke when using this product. Provide adequate ventilation. Remove all sources of ignition. Wash thoroughly after handling. Keep out of reach of children.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a cool, well-ventilated place.

**incompatible materials** No information available.

## 8. Exposure Controls/Personal Protection

**Exposure guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering controls** Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design

of exhaust systems.

### Personal protective equipment

#### **Eye/Face Protection**

Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.

#### **Skin protection**

Long sleeved clothing. Chemical resistant gloves.

#### **Respiratory protection**

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

### **General hygiene considerations**

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	faint
<b>Appearance</b>	yellow-orange		
<b>color</b>	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
<b>pH</b>	7.72	
<b>Melting point/freezing point</b>	8.72 °C / 48 °F	
<b>Boiling Point/Range</b>	No information available	
<b>Flash Point</b>	No information available	
<b>Evaporation Rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability limit in air</b>		
<b>Upper Flammability Limit</b>	No information available	
<b>Lower Flammability Limit</b>	No information available	
<b>vapor pressure</b>	No information available	
<b>Vapor Density</b>	No information available	
<b>Specific gravity</b>	1.1705@ 20 C	
<b>Water solubility</b>	No information available	
<b>Solubility in Other Solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	No information available	
<b>Autoignition temperature</b>	no data available	
<b>Decomposition temperature</b>	No information available	
<b>Viscosity, kinematic</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

### OTHER INFORMATION

<b>Softening point</b>	No information available
<b>molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>Liquid Density</b>	No information available

## 10. Stability and Reactivity

### Reactivity

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**incompatible materials**

No information available.

**Hazardous decomposition products**

None under normal use conditions.

## 11. Toxicological Information

**Information on Likely Routes of Exposure**

<b>Product information</b>	Pendimethalin 38.7% = Oral LD50 (rat) = >5,000 mg/kg Dermal LD50 (rat/rabbit) = >5,000 mg/kg Inhalation LC50 (rat) = >5.39 mg/L (Max achievable breathing zone) 4 hr Primary eye irritation (rabbit) = Not an eye irritant Primary dermal irritation (rabbit) = Not a skin irritant Dermal Sensitization = Not a sensitizer
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Moderately irritating to the eyes.
<b>Skin contact</b>	May be harmful if absorbed through the skin.
<b>Ingestion</b>	MAY BE HARMFUL IF SWALLOWED.

**Information on Toxicological Effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	no data available.
<b>Carcinogenicity</b>	The information below indicates whether any agency has listed any ingredient as a carcinogen.
<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	no data available.
<b>STOT - Repeated Exposure</b>	no data available.
<b>Aspiration hazard</b>	No information available.

**Numerical Measures of Toxicity - Product information**

<b>LD50 Oral</b>	> 5000 mg/kg (rat)
<b>LD50 Dermal</b>	> 5000 mg/kg (rat)
<b>LC50 Inhalation</b>	Inhalation LC50 > 5.39 mg/l

## 12. Ecological Information

IMDG - Marine Pollutant.

**Ecotoxicity**

## Pendimethalin:

Rainbow trout 96 hr LC50 = 0.89 mg/L  
 Daphnia Magna 48 hr EC50 = 0.979 mg/L  
 Green algae 72 hr EC50 = 0.0081 mg/L  
 Mallard duck LD50 = 1421 mg/kg  
 Honey Bee LD50 = 49.8 ug/bee

**Persistence/Degradability**

no data available.

**Bioaccumulation/ Accumulation**

No information available.

**Other Adverse Effects**

no data available

### 13. Disposal Considerations

**Waste Treatment Methods****Waste Disposal Method**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or 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.

**Contaminated packaging**

Refer to product label.

### 14. Transport Information

**DOT**

Not regulated when shipped domestically by highway in non-buk containers as per 49 CFR 171.4

**UN/ID no**

UN3082

**Proper shipping name**

Environmentally hazardous substance, liquid, n.o.s (Pendimethalin)

**Hazard class**

9

**Packing group**

PG III

**IMDG - Marine Pollutant**

IMDG - Marine Pollutant.

**TDG**

When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1

**UN/ID no**

UN3082

**Proper shipping name**

Environmentally hazardous substance, liquid, n.o.s. (Pendimethalin)

**Hazard class**

9

**Packing group**

PG III

**Marine Pollutant: Y or N [List Ingredient(s) with %]**

Marine pollutant.

**ICAO****UN/ID no**

UN3082

**Proper shipping name**

Environmentally hazardous substance, liquid, n.o.s (Pendimethalin)

**Hazard class**

9

**Packing group**

PG III

**Description**

IMDG - Marine Pollutant

**IATA**

<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Pendimethalin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Description</b>	IMDG - Marine Pollutant

**IMDG**

<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Pendimethalin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Environmental hazards</b>	IMDG - Marine Pollutant

## 15. Regulatory Information

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**Signal word** CAUTION

**Ventilation Control** PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

**Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Toxic to fish.**

**International Inventories**

<b>USINV</b>	Not present
<b>DSL/NDSL</b>	Not present
<b>EINECS/ELINCS</b>	Not Present
<b>ENCS</b>	Not Present
<b>China</b>	Not Present
<b>KECL</b>	Not Present
<b>PICCS</b>	Not Present
<b>AICS</b>	Not Present
<b>TSCA</b>	Not Present

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

**CERCLA**

Not applicable

**CERCLA**

SARA Product RQ 0

**RCRA**

**Pesticide Information**

**State Regulations**

**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl -2,6-dinitrobenzeneamine] - 40487-42-1		X			

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number 70506-230-55467

**16. Other Information**

**NFPA** HEALTH 1 flammability 1 Instability 0 Physical hazard -

Preparation Date 30-Aug-2022

Revision date 05-Sep-2019

**Revision Summary**

Update logo

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End of SDS