

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

Issue date: 9/1/2025 Revision date: 9/1/2025

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : PENDALIN H20

Product code : 1000778, 1002166, 3000371

1.2. Other means of identification

Registration Number: 83100-81

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Herbicide

Restrictions on use : Read and understand the entire FIFRA label before using. Use only according to label directions.

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

1.4. Supplier's details

Albaugh, LLC 1525 NE 36th Street Ankeny, IA 50021 T (515) 965-5240

1.5. Emergency phone number

Emergency number : For MEDICAL EMERGENCY (US or CANADA) 1-888-347-6732.

For CHEMICAL LEAK, SPILL, FIRE, or EXPOSURE Call 1-800-424-9300, Outside USA and

Canada: +1 703-741-5970 (collect call).

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Hazardous to the aquatic environment — Acute Hazard, Category 1 H400 Very toxic to aquatic life.

Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410 Very toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine	CAS-No.: 40487-42-1	37.54 – 40.44

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : Move the affected person to fresh air. Get medical attention if symptoms occur.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Get medical advice if skin irritation persists.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Get medical attention if irritation develops and persists.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.

Skin : May cause slight irritation to the skin.

Eyes : May cause minor eye irritation.

Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Not required.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None.

5.2. Specific hazards arising from the chemical

Fire hazard : This product is not classified as flammable or combustible.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear suitable protective clothing. Avoid contact with eyes, skin and clothing.

For non-emergency personnel

No additional information available

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For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Place in a suitable container for disposal in accordance with the waste regulations (see Section

13).

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes, skin and clothing. Wash hands with water and soap. Ensure adequate

ventilation

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and

settle out of solution. Under these conditions the product should be warmed to at least 40°F and

agitated well to dissolve any crystallized material prior to use.

Incompatible materials : Strong oxidizers.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : No particular/specific measures required. Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:

Chemically resistant gloves, made of barrier laminate, butyl rubber ≥14mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or viton ≥14 mils

Eye protection:

Use suitable eye protection

Skin and body protection:

To avoid contact with skin, wear long pants, long-sleeved shirt and shoes plus socks.

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Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

Color : Opaque Yellow

Odor : None

Odor threshold : No data available

pH : 8.05

Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : > 95.1 °C
Flammability (solid, gas) : Not applicable.
Vapor pressure : No data available
Relative vapor density at 20°C : No data available

Relative density : 1.191

Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : 53.01 mm²/s
Explosion limits : No data available

Particle characteristics : Particle characteristics : Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

PENDALIN H2O	DALIN H2O		
LD50 oral rat	> 5000 mg/kg		
LD50 dermal rat	> 5000 mg/kg		
ATE US (dust, mist)	2.24 mg/l/4h		
pendimethalin (ISO); N-(1-ethylpropyl)-2,6-din	ndimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine (40487-42-1)		
LD50 oral rat	> 4665 mg/kg		
LD50 dermal rabbit	2260 mg/kg		
LC50 Inhalation - Rat (Dust/Mist)	> 320 mg/l		

Skin corrosion/irritation : Not classified

pH: 8.05

Serious eye damage/irritation : Not classified.

pH: 8.05

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

PENDALIN H2O

Viscosity, kinematic 53.01 mm²/s

Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.

Skin : May cause slight irritation to the skin.

Eyes : May cause minor eye irritation.

Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term : Very toxic to aquatic life.

(acute)

Hazardous to the aquatic environment, long-term : Very toxic to aquatic life with long lasting effects.

(chronic)

pendimethalin (ISO); N-(1-ethylpropyl)-2,6-din	itro-3,4-xylidine (40487-42-1)
LC50 - Fish [1]	0.00018 mg/l Source: NLM;HSDB
EC50 - Crustacea [1]	0.28 mg/l Source: ECOTOX

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pendimethalin (ISO); N-(1-ethylpropyl)-2,6-din	n (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine (40487-42-1)		
EC50 96h - Algae [1]	0.2808 mg/l Source: ECOTOX		
ErC50 algae	0.0125 mg/l		
NOEC chronic algae	0.0056 mg/l		

12.2. Persistence and degradability

PENDALIN H2O	N H2O	
Persistence and degradability	No additional information available.	
pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine (40487-42-1)		
Persistence and degradability	No additional information available.	

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or insate is a

violation of Federal law. 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.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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Product/Packaging disposal recommendations

: [Nonrefillable containers 5 gallons or less:] [Container Handling: Nonrefillable rigid plastic container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

[Nonrefillable containers larger than 5 gallons:] [Container Handling: Nonrefillable rigid plastic container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store

rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

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.

<u>ICAO</u>

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

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IATA

UN/ID no. UN3082

Proper shipping name Environmentally hazardous substances, liquid, n.o.s (Pendimethalin)

Hazard class 9
Packing group PG III

Description IMDG - Marine Pollutant

IMDG

UN/ID no. UN3082

Proper shipping name Environmentally hazardous substances, liquid, n.o.s (Pendimethalin)

Hazard class 9
Packing group PG III

Environmental hazards IMDG - Marine Pollutant

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4- xylidine CAS-No. 40487-42-1 37.54 – 40.44%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

FIFRA Labelling

EPA Registration Number 83100-81

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.

FIFRA Precautionary Statement None

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard (HCS 2024) and the Hazardous Products Regulation (WHMIS 2015 rev 2022)

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Full text of hazard classes and H-statements	
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.