

AOWEI AGRICULTURAL TECHNOLOGY CO., LTD.

ADD: NO. 27, CBD BUSINESS INNER RING ROAD, ZHENGDONG NEW DISTRICT, ZHENGZHOU, CHINA

Website: www.aoweichem.com www.agriplantgrowth.com Email: admin@aoweichem.com

TEL: 86-371-63229216 / 86-15324840068- FAX: 86-371-63229216

Material Safety Data Sheet

MSDS OF P-Nitrophenol

Section 1 - Chemical Product and Company Identification

MSDS Name: P-Nitrophenol

Synonyms: 4-Hydroxynitrobenzene; 4-Nitrophenol.

Company Identification:

Aowei Agricultural Technology Co.,Ltd.

No.27,CBD Business Inner Ring Road,Zhengdong New District,Zhengzhou,Henan,China

For information, call: 86-371-63229216/ 86-15324840068

Emergency Number: 86-371-63229216

For CHEMTREC assistance, call: 86-371-63229216

For International CHEMTREC assistance, call: 86-371-63229216

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
100-02-7	P-Nitrophenol	99%	202-811-7

Hazard Symbols: XN

Risk Phrases: 20/21/22 33

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: yellow solid. May cause methemoglobinemia. May cause central nervous system effects. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). **Warning!** Causes eye irritation. Causes severe skin irritation. May cause respiratory and digestive tract irritation. Harmful if swallowed. May cause kidney damage.

Target Organs: Blood, central nervous system.

Potential Health Effects

Eye: Causes severe eye irritation.

Skin: Causes severe skin irritation. If absorbed, causes symptoms similar to those of ingestion.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache,

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dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Ingestion may produce shock, collapse, and convulsions.

Inhalation: May cause respiratory tract irritation. May cause effects similar to those described for ingestion.

Chronic: Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Remove contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Absorption of this product into the body may cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood). Moderate degrees of cyanosis need to be treated only by supportive measures: bed rest and oxygen inhalation. For methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood. Cleansing of the entire contaminated area of the body is of utmost importance.

Section 5 - Fire Fighting Measures

General Information: Evacuate area and fight fire from a safe distance. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes. Containers may explode in the heat of a fire. Combustible material; even though it may take some effort to ignite.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not available.

Autoignition Temperature: 541 deg F (282.78 deg C)

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 2

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Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Wash clothing before reuse.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep away from food and drinking water. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
P-Nitrophenol	none listed	none listed	none listed

OSHA Vacated PELs: p-Nitrophenol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: brown - yellow

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Odor: odorless

pH: Not available.

Vapor Pressure: .6 mm Hg @ 120 deg

Vapor Density: 4.8

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 534 deg F

Freezing/Melting Point:113.4 deg C

Decomposition Temperature:Not available.

Solubility: Insoluble.

Specific Gravity/Density: 1.479 - 1.495

Molecular Formula:C₆H₅NO₃

Molecular Weight:139.0399

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials, temperatures above 125°C.

Incompatibilities with Other Materials: Strong oxidizing agents; Strong bases; Diethyl phosphite

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 100-02-7: SM2275000

LD50/LC50:

CAS# 100-02-7:

Dermal, guinea pig: LD50 = >1 gm/kg;

Oral, mouse: LD50 = 282 mg/kg;

Oral, rat: LD50 = 202 mg/kg;

Skin, rat: LD50 = 1024 mg/kg;<br.

Carcinogenicity:

CAS# 100-02-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: Human mutation data has been reported.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

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Mutagenicity: Mutagenic effects have occurred in experimental animals. Mutagenic effects have occurred in humans.

Other Studies: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 100-02-7: waste number U170.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	NITROPHENOLS	NITROPHENOLS	NITROPHENOLS	NITROPHENOLS	NITROPHENOLS
Hazard Class:	6.1	6.1	6.1	6.1	6.1
UN Number:	UN1663	UN1663	UN1663	UN1663	UN1663
Packing Group:	III	III	III	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 100-02-7 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 100-02-7: Effective 4/13/89; Sunset 6/30/98

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Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs

CAS# 100-02-7: 100 lb final RQ (Listed under Nitrophenol, mixed); 45.4 kg final RQ (Listed

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 100-02-7: acute, chronic, reactive.

Section 313

This material contains p-Nitrophenol (CAS# 100-02-7, 98%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 100-02-7 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 100-02-7 is listed as a Hazardous Substance under the CWA. CAS# 100-02-7 is listed as a Priority Pollutant under the Clean Water Act. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 100-02-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

Safety Phrases:

S 28 After contact with skin, wash immediately with...

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WGK (Water Danger/Protection)

CAS# 100-02-7: 2

Canada - DSL/NDSL

CAS# 100-02-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

Canadian Ingredient Disclosure List

CAS# 100-02-7 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

Section 16 - Additional Information

MSDS Creation Date: 5/14/2010

Revision #5 Date: 2/18/2021

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall AOWEI GROUP be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if AOWEI GROUP has been advised of the possibility of such damages.