

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 03.

Issue date 02/03/2021 Reviewed on 02/03/2021

1 Identification

- · Product Identifier
- · Trade Name: p-Dimethylaminobenzaldehyde (DMAB)
- Product Number: 3700-0400
- · Relevant identified uses of the substance or mixture and uses advised against:

No further relevant information available.

- · Product Description: p-Dimethyaminobenzaldehyde (DMAB)
- Details of the Supplier of the Safety Data Sheet:
- · Manufacturer/Supplier:

Pickering Laboratories, Inc.

1280 Space Park Way

Mountain View, CA 94043

Phone: (650) 694-6700

Fax: (650) 968-0749

www.pickeringlabs.com

support@pickeringlabs.com

Emergency telephone number:

Clean Harbors Environmental Services

1-800-645-8265

2 Hazard(s) Identification

· Classification of the substance or mixture:



Acute Tox. 4 H302 Harmful if swallowed.

- · Label elements:
- · Hazard pictograms:



- · Signal word: Warning
- · Hazard-determining components of labeling:

4-dimethylaminobenzaldehyde

· Hazard statements:

H302 Harmful if swallowed.

· Precautionary statements:

P260 Do not breathe dust.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P281 Use personal protective equipment as required.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P331 Do NOT induce vomiting. P410 Protect from sunlight.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values.

0 % of the mixture consists of component(s) of unknown toxicity.



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- · Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1 Fire = 0

REACTIVITY O Physical Hazard = 0

· Hazard(s) not otherwise classified (HNOC): None known

Composition/Information on Ingredients

- · Chemical characterization: Substance
- Description: Mixture of substances listed below with non-hazardous additions.

· Dange	Dangerous Components:			
	00-10-7 S: CU 5775000	4-dimethylaminobenzaldehyde	♠ Acute Tox. 4, H302	99.99%

4 First-Aid Measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

- · After inhalation: Remove affected person to fresh air. Seek medical attention if symptoms persist.
- · After skin contact:

Immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical assistance.

· After eye contact:

If eye irritation occurs, consult a doctor.

Rinse opened eye for several minutes under running water.

· After swallowing:

Immediately call a doctor. Do not induce vomitting. If conscious, rinse mouth with water ensuring that the rinse is not swallowed.

- · Information for doctor Treat symptomatically and supportively. No specific antidote.
- · Most important symptoms and effects, both acute and delayed: No further relevant information available.
- Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Fire-Fighting Measures

- Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No further relevant information.
- Special hazards arising from the substance or mixture:

Nitrogen oxides (NOx)

Carbon Dioxide (CO₂)

Carbon monoxide (CO)

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- · Advice for firefighters
- Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

· Additional information:

This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures:

Avoid formation of dust.

Avoid breathing dust.

- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up:

Use the appropriate tools to collect the material and dispose of it in an approved waste disposal container.

Dispose of contaminated material as waste according to section 13.

Dispose of the collected material according to regulations.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

· PAC-1:

All components have the value 8.2 mg/m³.

PAC-2:

All components have the value 90 mg/m³.

· PAC-3:

All components have the value 250 mg/m³.

7 Handling and Storage

- · Handling
- · Precautions for safe handling:

Avoid contact with skin, eyes and clothing

Avoid breathing dust.

Use personal protection equipment as outlined in section 8.

Information about protection against explosions and fires:

This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

- · Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and receptacles:

Store in dry conditions at a temperature range of 8°C - 25°C.

Store away from direct sunlight.

- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- · Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

· Additional information about design of technical systems: No further data; see section 7.

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- · Control parameters:
- · Components with occupational exposure limits:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- · Personal protective equipment
- General protective and hygienic measures:

Use adequate exhaust ventilation to prevent inhalation of dust particles.

Do not eat or drink while handling product.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Breathing equipment:



NIOSH/OSHA approved breathing apparatus.

- · **Protection of hands:** Not required.
- Material of gloves: Latex or vinyl
- · Penetration time of glove material: Not applicable.
- · Eye protection: Not required.
- Body protection: Lab coat
- · Limitation and supervision of exposure into the environment: None

9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information

· Appearance:

Form:
Color:
Color:
Codor:
Codor:
Codor:
Codor threshold:

· Change in condition

Melting point/Melting range: 73-75 °C (163.4-167 °F)

· Flash point: None

Flammability (solid, gaseous): Not determined.
 Ignition temperature: Not applicable
 Decomposition temperature: Not determined.

· **Auto igniting:** Product is not self-igniting.

• Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.Upper: Not determined.Vapor pressure: Not applicable.

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• **Density @ 20 °C (68 °F):** 0.78 g/cm³ (6.5091 lbs/gal)

Bulk density: 380 kg/m³
 Relative density: Not determined.
 Vapor density: Not applicable.
 Evaporation rate: Not applicable.

· Solubility in / Miscibility with:

Water: Slightly soluble

Soluble in alcohol, ether, chloroform, acetic acid

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

· Solvent content:

VOC content: 0.00 %
Solids content: 100.0 %

· Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

- · Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid:

Dust generation.

Direct sunlight may cause discoloration.

· Incompatible materials:

Strong oxidizing agents.

Strong bases

· Hazardous decomposition products: Carbon dioxide, carbon monoxide and nitrogen oxides.

11 Toxicological Information

- · Information on toxicological effects:
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:				
100-10-7 4-dimethylaminobenzaldehyde				
Oral	LD50	800 mg/kg (Mouse)		
		>6,400 mg/kg (Rat)		
Inhalative	LC50/96 hours	45.7 mg/l (Pimephales)		

- · Primary irritant effect:
- · On the skin: Mild irritant effect.
- · On the eye: Mild irritant effect.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

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· Carcinogenic categories:

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

<u>12 Ecologica</u>l Information

- · Toxicity:
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability: No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment:
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects: No further relevant information available.

13 Disposal Considerations

- · Waste treatment methods
- Recommendation:

Do not allow product to reach sewage system.

This product may be mixed with a combustible solvent and burned in a chemical incinerator equipped with an after burner and scruber. This product can also be sent to an EPA approved waste disposal facility.

Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packaging
- · **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

· UN-Number:

· DOT, ADR/ADN, ADN, IMDG, IATA Non-Regulated Material

· UN proper shipping name:

· DOT, ADR/ADN, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es):

· DOT, ADR/ADN, ADN, IMDG, IATA

· Class: Non-Regulated Material

· Packing group:

· **DOT, ADR/ADN, IMDG, IATA**Non-Regulated Material

Environmental hazards: Not applicable.Special precautions for user: Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

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· UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture: No further relevant information available.
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients are listed.

- · California Proposition 65:
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· New Jersey Right-to-Know List:

None of the ingredients are listed.

New Jersey Special Hazardous Substance List:

None of the ingredients are listed.

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Pennsylvania Special Hazardous Substance List:

None of the ingredients are listed.

- Carcinogenic categories:
- · EPA (Environmental Protection Agency):

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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- Signal word: Warning
- · Hazard-determining components of labeling:

4-dimethylaminobenzaldehyde

· Hazard statements:

H302 Harmful if swallowed.

· Precautionary statements:

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P330 Rinse mouth.

P331 Do NOT induce vomiting. P410 Protect from sunlight.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

None of the ingredients are listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- · Contact:
- Date of last revision/ revision number: 02/03/2021 / 11
- · Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, ÉU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

* Data compared to the previous version altered.

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