According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 12.21.2017

p-Dichlorobenzene,

SECTION 1: Identification

Product identifier

Product name: p-Dichlorobenzene, Product code: S25299B

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier:

AquaPhoenix Scientific	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A Carcinogenicity, category 2 Acute aquatic hazard, category 1 Chronic aquatic hazard, category 1

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation

H351 Suspected of causing cancer

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements:

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P273 Avoid release to the environment

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p-Dichlorobenzene,

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing P308+P313 If exposed or concerned: Get medical advice/attention P391 Collect spillage P405 Store locked up P501 Dispose of contents and container as instructed in Section 13 Hazards not otherwise classified: None

nazarus not otnerwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 106-46-7	p-Dichlorobenzene	100

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Seek medical attention if irritation persists or if concerned

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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p-Dichlorobenzene,

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	p-Dichlorobenzene	106-46-7	TWA: 75 ppm (450 mg/m³) - 8H
Canada	p-Dichlorobenzene	106-46-7	TWA: 20 ppm (120 mg/m³) - 8H

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or

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p-Dichlorobenzene,

handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White solid
Odor	Mothball-like, penetrating odor
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	53°C
Initial boiling point/range	174°C
Flash point (closed cup)	65°C
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	1 mmHg at 25°C
Vapor density	5.1
Density	Not determined or not available.
Relative density	1.458 g/cm³ at 20°C
Solubilities	Insoluble in water.
Partition coefficient (n-octanol/water)	log Pow: 3.45
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

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p-Dichlorobenzene,

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Store away from oxidizing agents, strong acids or bases. High temperatures, ignition sources, dust generation.

Incompatible materials:

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products:

Hydrogen chloride, chlorine, carbon monoxide, carbon dioxide.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
p-Dichlorobenzene	oral	LD50 - Rat - 500 mg/kg
	dermal	LD50 - Rabbit - >2000 mg/kg

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
p-Dichlorobenzene	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Suspected of causing cancer

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
p-Dichlorobenzene	Group 2B

National Toxicology Program (NTP):

Name	Classification
p-Dichlorobenzene	Reasonably anticipated to be human carcinogens

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

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p-Dichlorobenzene,

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available. Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life

Product data: No data available.

Substance data:

Name	Result
p-Dichlorobenzene	LC50 - Crustaceans - 48 H - 0.0007 - 1.29 mg/1
	EC50 - Algae - 72H - 77.5 mg/l
	LC50 - 96 H - 1.88 - 34.5 mg/1

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available. Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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p-Dichlorobenzene,

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN3077
UN proper shipping name	Environmentally Hazardous Substances, Solid N.O.S. (1,4- Dichlorobenzene).
UN transport hazard class(es)	9
Packing group	
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN3077
UN proper shipping name	Environmentally Hazardous Substances, Solid N.O.S. (1,4- Dichlorobenzene).
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN3077
UN proper shipping name	Environmentally Hazardous Substances, Solid N.O.S. (1,4- Dichlorobenzene).
UN transport hazard class(es)	9
Packing group	
Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

106-46-7

p-Dichlorobenzene

Listed

Significant New Use Rule (TSCA Section 5): Not determined. Export notification under TSCA Section 12(b): Not determined.

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	Chronic	Chronic Fire Pressure Reactive		e			
No	No	No	No	No			
ARA Section 30	2 extremely hazardo	ous substances:	Not determined.	I			
	3 toxic chemicals:						
106-46-7	p-Dichlorobenze	p-Dichlorobenzene					
ERCLA:					•		
106-46-7	p-Dichlorobenze	p-Dichlorobenzene Listed					
RCRA:				-	-		
106-46-7	p-Dichlorobenze	p-Dichlorobenzene Listed					
ection 112(r) of	the Clean Air Act (CAA): Not determ	ined.				
lassachusetts R	ight to Know:						
106-46-7	p-Dichlorobenzene						
	to Know:						
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SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0 HMIS: 2-0-0-X

Initial preparation date: 12.21.2017

End of Safety Data Sheet