

LumiQ®p-PbS-1450 PbS ink

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006, as amended by Commission

Regulation (EU) 2020/878

Version: 2602

Section 1: Identification of the materials and of the company

1.1 Product identifiers

Product name : PbS QD p-type ink

Product number : P26021

Brand : AilumiQ

1.2 Relevant identified uses of the substance and uses advised against

Identified uses : Laboratory chemicals

Uses advised against : For R&D use only. Not for pharmaceutical, or other uses.

1.3 Details of the supplier of the safety data sheet

Company : AilumiQ, Taipei City, Taiwan

Telephone : +886 2-7701-7980

E-mail address : info@ailumiq.com

Section 2: Hazards identification

2.1 Classification of the materials

Skin corrosion, (Sub-category 1A)

H314: Causes severe skin burns and eye damage.

Serious eye damage, (Category 1)

H318: Causes serious eye damage.

Specific target organ toxicity (single exposure) — Category 3

H336: May cause drowsiness or dizziness

Specific target organ toxicity (repeated exposure) — Category 2

H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

Aspiration hazard — Category 1

H304: May be fatal if swallowed and enters airways

Reproductive toxicity — Category 1A

H361FD: Suspected of damaging fertility. Suspected of damaging the unborn child.

Chronic aquatic toxicity — Category 2

H411: Toxic to aquatic life with long lasting effects

2.2 Label elements



Hazard pictograms:

Signal word:

Hazaed Statements

Danger

H304

May be fatal if swallowed and enters airways

H314

Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

H336

May cause drowsiness or dizziness

H360FD

May damage fertility. May damage the unborn child

H373 May cause damage to organs through prolonged

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

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

P210 Do not breathe mist or vapours.

P260 Ground and bond container and receiving equipment.

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

P273 Avoid release to the environment

Response:

P303 + P361 + P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water

P304 + P340 + P310 If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazardous components which must be listed on the label:

Lead sulphide

Reduced Labelling (<= 125 ml)



Hazard pictograms:

Signal word: Danger

Hazard Statements

H314 Causes severe skin burns and eye damage.

H360FD May damage fertility. May damage the unborn child

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements

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

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

P303 + P361 + P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water

P304 + P340 + P310 If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements None

2.3 Other hazards

This material contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The material does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The material does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Section 3: First aid measures

General advice	First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in the physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

Section 4: Firefighting measures

4.1 Extinguishing media

Suitable extinguishing media	Water Foam Carbon dioxide (CO ₂) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.

4.2 Special hazards arising from the materials

Carbon oxides
Sulphur oxides
Lead oxides
Hydrogen fluoride
Vapors are heavier than air and may spread along floors.
Development of hazardous combustion gases or vapours possible in the event of fire.

4.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

4.4 Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 5: Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 7.

5.2 Environmental precautions

Do not let products enter drains.

5.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up the affected area.

Section 6: Handling and storage

6.1 Precautions for safe handling

Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
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6.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Keep container tightly closed in a dry and well-ventilated place.
Storage class	Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials
Storage temperature	4 - 8 °C
Further information on storage stability	Air, light, and moisture sensitive. Heat sensitive. Handle and store under inert gas.

Section 7: Exposure controls/personal protection

7.1 Control parameters

Ingredients with workplace control parameters

7.2 Exposure controls

Personal protective equipment

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
Skin and body protection	Protective clothing
Respiratory protection	Required when vapours/aerosols are generated.

Section 8: Physical and chemical properties

8.1 Information on basic physical and chemical properties

Physical state	Liquid
Color	Black
Melting point / freezing point	-4 °C - lit.
Boiling range	around 55~80 °C
Density range	around 1.59~1.75 g/cm ³

SECTION 9: Stability and reactivity

9.1 Reactivity

No data available

9.2 Chemical stability

The product is chemically stable under inert conditions (room temperature)

9.3 Possibility of hazardous reactions

Violent reactions possible with:
Strong oxidizing agents
Metals

9.4 Conditions to avoid

Heating.

Section 10: Disposal considerations**10.1 Waste treatment methods**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Disclaimer

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