

LumiQ®n-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 n-type ink

Product number : N260201

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

Flammable liquids — Category 2

H226: Flammable liquid and vapour

Skin irritation — Category 2

H315: Causes skin irritation

Eye irritation — Category 2

H319: Causes serious eye irritation.

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

Aspiration hazard — Category 1

H304: May be fatal if swallowed and enters airways

Reproductive toxicity — Category 1A

H360FD: May damage fertility. May damage 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: Danger

Hazard Statements

H226 Flammable liquid and vapour

H304 May be fatal if swallowed and enters airways

H315 Causes skin irritation

H319	Causes serious eye irritation.
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	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P273	Avoid release to the environment

Response:

P301 + P310	If swallowed: Immediately call a doctor
P303 + P361 + P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water
P305 + P351 + P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do not induce vomiting

Hazardous components which must be listed on the label:

Lead sulphide

Reduced Labelling (<= 125 ml)



Hazard pictograms:

Signal word: Danger

Hazaed Statements

H304	May be fatal if swallowed and enters airways
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
P301 + P310	If swallowed: Immediately call a doctor
P331	Do not induce vomiting

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	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. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call an ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

Section 4: Firefighting measures

4.1 Extinguishing media

Suitable extinguishing media Water Foam Carbon dioxide (CO₂) 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
Nitrogen oxides (NO_x)
Sulphur oxides
Lead oxides
Hydrogen iodide
Hydrogen fluoride Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
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

Remove container from danger zone and cool with water. 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. Risk of explosion.

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

Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

6.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorised persons.
Storage class	Storage class (TRGS 510): 3: Flammable liquids
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). Safety glasses
Skin and body protection	Flame retardant antistatic 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
Flash point	AROUND 30 °C - closed cup
Boiling range	120~140 °C

Density range 1.25~1.29 g/cm³

SECTION 9: Stability and reactivity

9.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

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 Strong acids

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

The information contained in this document is, to the best of our knowledge and belief, accurate as of the date of issuance. It is provided solely as guidance for the safe handling, use, processing, storage, and disposal of the material described herein. This information should not be interpreted as a guarantee of any specific property, nor as a specification of quality or suitability for any particular application. The details presented apply exclusively to the material identified and may not remain applicable if the material is used in combination with other substances or in any process not expressly indicated in this document.