

SAFETY DATA SHEET

Version 1.0
Revision Date: 15.06.2022

PRODUCT: AQM-SiQD@Mixed Surface

SECTION 1: Product and company identification

1.1 Product identifiers

Product name : AQM SiQD@Mixed Surface
Physical state : Liquid
CAS-No. : N/A

1.2 Identified uses of the substance or mixture

Identified uses : Laboratory chemical, synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Applied Quantum Materials Inc.
B211, 2011 – 94 Street
Edmonton, Alberta, T6N 1H1
Telephone : +1 (587) 635-2060

1.4 Emergency telephone number

Emergency phone number : +1 (780) 953-4428

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Considered non-hazardous according to WHMIS 2015 (GHS) therefore not regulated by the Hazardous Products Regulations (HPR) (SOR/2015-17).

Other hazards

None

Unknown acute toxicity

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances

3.1.1 AQM SiQD@Mixed Surface in 2 mg/mL water

Common name : SiQD@Mixed Surface
Composition : Silicon quantum dots terminated with PEG/10-undecanoic acid groups in
2 mg/mL water
CAS-No. : N/A

SECTION 4: First aid measures

4.1 Description of first-aid measures

General Advice

Consult a physician. Show this SDS sheet to the doctor in attendance. Move out of the dangerous area.

If Inhaled

Remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

May cause skin irritation. Remove all contaminated clothing. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

May cause eye irritation. Rinse thoroughly with water for at least 15 minutes. Remove contact lenses. Consult a physician.

If swallowed

May be harmful if swallowed. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/effects

No known symptoms/effects.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known

5.2 Special hazards arising from the substance or mixture

Fire hazard

Negligible fire hazard.

Explosion hazard

Negligible explosion hazard.

5.3 Special protective equipment and precautions for firefighters

Firefighting instructions

Exercise caution when fighting any chemical fire.

Protection during firefighting

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous Combustion Products

No data available.

Other Information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures

Use appropriate personal protective equipment. Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Avoid dust formation. Avoid contact with skin and eyes.

6.1.1 For non-emergency personnel

Protective equipment

Wear protective equipment as described in Section 8.

Emergency procedures

Evacuate unnecessary personnel.

6.1.2 For emergency responders

Protective equipment

Do not attempt to respond without suitable protective equipment. Cleanup crew should use appropriate personal protective equipment. For further information refer to Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Dispose of as normal trade waste in compliance with local and national regulations.

6.3 Methods and materials for containment and cleaning up

For containment

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Method for cleaning up

Collect with an electrically protected vacuum cleaner or by wet-brushing. Place in container for disposal according to local / national regulations. See Section 13 for disposal.

6.4 Reference to other sections

See Section 8 for exposure controls and personal protection. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition- No smoking. Take measures to prevent buildup of electrostatic charge.

Advice on protection against fire and explosion

Product is not flammable.

Hygiene measures

Remove any contaminated clothing. Preventive skin protection recommended. Wash hands and other exposed areas with mild soap and water before and after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be resealed and kept upright to prevent leakage.

Incompatible materials

None known.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters/ exposure limits

Control Parameters/ exposure limits

Not available

8.2 Exposure controls

Appropriate Engineering Controls

Provide local exhaust or general room ventilation.

8.3 Individual protection measures/Personal protective equipment

Individual protection measures

Handle in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and immediately after handling the product.

Personal protection equipment

Eye/Face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves a after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

The type of protective equipment must be selected according to the concentration and amount of dangerous substances used in which to redissolve the solid powder.

Respiratory protection

The type of protective equipment must be selected according to the concentration and amount of dangerous substances used in which to redissolve the solid powder. Full-face respirators may be required, tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: Not available
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point	No data available
f) Initial boiling point	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	Not flammable
j) Upper/lower flammability or explosive limits	Not determined
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Density	Not applicable
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Chemically stable under standard ambient conditions (room temperature). Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified.

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitization

No data available.

Reproductive toxicity

No data available

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

Stable

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal consideration

13.1 Disposal methods

Sewage disposal recommendations

Do not dispose of waste into sewer.

Product/Packaging disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.

Ecology – waste materials

Avoid release into the environment.

Contaminated packaging

Dispose of as unused product in accordance with local and national regulations.

Waste from residues/unused products

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14: Transport information

Not considered a hazardous material therefore not regulated.

SECTION 15: Regulatory information

15.1 Canada regulations

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16: Other information

The information provided in this Safety Data Sheet is accurate to the best of our knowledge at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification, since the conditions of the abovementioned operations are beyond our control. The information relates only to the designated material and may not be valid for such material used in the combination with any other materials or in any processes unless specified in the text.