

# SAFETY DATA SHEET

#### 1. Identification

**Product identifier Photovolt Aquatest 2% Water Standard** 

Other means of identification

**Product code** 2712803

Recommended use Laboratory reagent for water determination using the Karl Fischer method.

**Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

**Company name** Photovolt Instruments, Inc.

**Address** 6323 Cambridge St.

Minneapolis MN

55416 US

**Telephone** 952-848-2000 800-222-5711

Website www.photovolt.com E-mail sales@photovolt.com

**Emergency phone** 800-451-8346 Contract #7612

number

### 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 2 **Health hazards** Acute toxicity, dermal Category 3 Acute toxicity, inhalation Category 3

Serious eye damage/eye irritation Category 2A Reproductive toxicity Category 1B Specific target organ toxicity, single exposure Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 1 (central nervous system, visual

exposure organs)

OSHA hazard(s) Not classified.

**Label elements** 



Signal word Danger

**Hazard statement** Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious

eye irritation. Toxic if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs

(central nervous system, visual organs) through prolonged or repeated exposure.

**Precautionary statement Prevention** 

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Use non-sparking tools and explosion-proof equipment. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash skin thoroughly after handling.

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**Response** Eliminate all ignition sources if safe to do so. IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Rinse mouth. If eye irritation persists: Get medical

advice/attention. In case of fire: Use appropriate media for extinction.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep

cool. Store locked up.

**Disposal** Dispose of contents/container to an approved incineration plant.

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid

**Supplemental information** 

**Hazard statement** Static accumulating flammable liquid can become electrostatically charged even in bonded and

grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

**Precautionary statement** 

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and

receiving equipment. These alone may be insufficient to remove static electricity.

# 3. Composition/information on ingredients

#### **Mixtures**

| Hazardous components     |            |    |
|--------------------------|------------|----|
| Chemical name            | CAS number | %  |
| METHYL ALCOHOL           | 67-56-1    | 98 |
| Non-hazardous components |            |    |
| Chemical name            | CAS number | %  |
| WATER                    | 7732-18-5  | 2  |

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

# **Composition comments** The full text to

The full text for all R-phrases is displayed in Section 16 of the MSDS. The full text for all R- anc H-phrases is displayed in section 16.

# 4. First-aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

**Skin contact**Take off immediately all contaminated clothing. Wash clothing separately before reuse.

Immediately flush skin with plenty of water. Call a physician or Poison Control Center immediately.

For minor skin contact, avoid spreading material on unaffected skin.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician or Poison Control Center immediately.

**Ingestion**Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce

vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way

valve or other proper respiratory medical device.

Prolonged exposure may cause chronic effects.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

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**General information** 

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Irritation of eyes and mucous membranes. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Narcosis. Decrease in motor functions. Behavioral changes.

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Take off contaminated clothing and shoes immediately. IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Wash contaminated clothing before reuse.

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Material name: Photovolt Aquatest 2% Water Standard SDS US

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret. M: M-factor

### 5. Fire-fighting measures

Suitable extinguishing media

Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Alcohol resistant foam. Powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. By heating and fire, harmful vapors/gases may be formed. Material will float and may ignite on surface of water.

**Special protective equipment** and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire-fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Use standard firefighting procedures and consider the hazards of other involved materials. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

In the event of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Immediately evacuate personnel to safe areas. Local authorities should be advised if significant spillages cannot be contained. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Prevent entry into waterways, sewers, basements or confined areas.

Large Spills: Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb spillage with non-combustible, absorbent material. Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the

#### **Environmental precautions**

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

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### 7. Handling and storage

### **Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Vapors may form explosive mixtures with air. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code". May be ignited by open flame. These alone may be insufficient to remove static electricity. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with skin. Avoid contact during pregnancy/while nursing. Avoid contact with clothing. Use personal protective equipment as required. Use only in area provided with appropriate exhaust ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

CAUTION Keep locked up. Store in a place accessible by authorized persons only. The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

| Components                                  | Туре | Value                           |  |  |
|---|------|---------------------------------|--|--|
| METHYL ALCOHOL (CAS 67-56-1)                | PEL  | 260 mg/m3                       |  |  |
| •   |      | 200 ppm                         |  |  |
| US. ACGIH Threshold Limit Values            |      |                                 |  |  |
| Components                                  | Туре | Value                           |  |  |
| METHYL ALCOHOL (CAS 67-56-1)                | STEL | 250 ppm                         |  |  |
| •   | TWA  | 200 ppm                         |  |  |
| US. NIOSH: Pocket Guide to Chemical Hazards |      |                                 |  |  |
| Components                                  | Туре | Value                           |  |  |
| METHYL ALCOHOL (CAS<br>67-56-1)             | REL  | 260 mg/m3                       |  |  |
|   | STEL | 200 ppm<br>325 mg/m3<br>250 ppm |  |  |

### **Biological limit values**

### **US. ACGIH. BEIs. Biological Exposure Indices**

| Components                   | Value   |             | Sampling Time |
|------------------------------|---------|-------------|---------------|
| Components                   | Value   | Determinant | Sampling Time |
| METHYL ALCOHOL (CAS 67-56-1) | 15 mg/l | Methanol    | *             |

<sup>\* -</sup> For sampling details, please see the source document.

#### **Exposure guidelines**

#### **US. ACGIH Threshold Limit Values**

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

METHYL ALCOHOL; METHANOL (CAS 67-56-1)

Can be absorbed through the skin.

US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).

METHYL ALCOHOL (CAS 67-56-1) Skin designation applies.

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**US. NIOSH: Pocket Guide to Chemical Hazards** 

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

US. OSHA Table Z-1-A (29 CFR 1910.1000)

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

**Appropriate engineering** 

Explosion-proof general and local exhaust ventilation. Provide eyewash station.

controls

Individual protection measures, such as personal protective equipment

Eye/face protection Do not get in eyes. Chemical goggles are recommended. Eye wash fountains are required.

Skin protection

**Hand protection** Wear protective gloves.

Other Personal protection equipment should be chosen according to the CEN standards and in discussion

with the supplier of the personal protective equipment. Wear appropriate chemical resistant

clothing. Chemical resistant gloves.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use an organic vapor

respirator for concentrations exceeding the Occupational Exposure Limit.

Thermal hazards Not available.

**General hygiene** considerations

When using, do not eat, drink or smoke. Do not get in eyes. Avoid contact with skin. Avoid contact with clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. Provide eyewash station and safety shower.

### 9. Physical and chemical properties

**Appearance** Clear. **Physical state** Liquid. **Form** Liquid. Color Colorless. Odor Sliaht.

**Odor threshold** Not available. Not available.

Melting point/freezing point Initial boiling point and

boiling range

-144 °F (-97.8 °C) estimated 148.46 °F (64.7 °C) estimated

53.60 °F (12.00 °C) estimated Flash point

Not available. **Evaporation rate** Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

6 % estimated

Flammability limit -

36 % estimated

upper (%)

**Explosive limit - lower** 

Not available.

(%)

**Explosive limit - upper** 

Not available.

(%) Vapor pressure

169.3082 hPa estimated

Vapor density Not available. **Relative density** Not available. Solubility(ies) Not available. **Partition coefficient** Not available.

(n-octanol/water)

**Auto-ignition temperature** 464 °F (240 °C) estimated

**Decomposition temperature** Not available. **Viscosity** Not available.

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#### Other information

**Density** 0.79 g/cm<sup>3</sup>

Flammability class Flammable IB estimated

Flash point class Flammable IB

Percent volatile 100 % Specific gravity 0.79

VOC (Weight %) 98 % estimated

### 10. Stability and reactivity

**Reactivity** Strong oxidizing substances.

**Chemical stability** Risk of explosion. Material is stable under normal conditions.

**Possibility of hazardous** 

No dangerous reaction known under conditions of normal use. Hazardous polymerization does not

reactions occur.

**Conditions to avoid** Heat, flames and sparks. Avoid temperatures exceeding the flash point.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition** 

products

Irritants. May include oxides of carbon.

### 11. Toxicological information

#### Information on likely routes of exposure

**Ingestion** Toxic if swallowed.

**Inhalation** Toxic by inhalation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and

nausea.

**Skin contact**Toxic in contact with skin. **Eye contact**Harmful in contact with eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Narcosis. Behavioral changes. Decrease in motor functions. Symptoms of overexposure may be headache,

dizziness, tiredness, nausea and vomiting.

#### Information on toxicological effects

Acute toxicity

Toxic by inhalation. Toxic if swallowed. Toxic in contact with skin.

| Product Species | Test Results |
|-----------------|--------------|
|-----------------|--------------|

Photovolt Aquatest 2% Water Standard (CAS Mixture)

| Acute  |
|--------|
| Dermal |

LD50 Rabbit 16122.4492 mg/kg, estimated

Inhalation

LC50 Cat 87.1531 mg/l, 4.5 Hours, estimated

44.5714 mg/l, 6 Hours, estimated

Rat 65306.1211 mg/l, 4 Hours, estimated

89.2857 mg/l, 6 Hours, estimated

Oral

LD50 Dog 8163.2651 mg/kg, estimated

Monkey 2.0408 g/kg, estimated

Mouse 7448.9795 mg/kg, estimated Rabbit 14.6939 g/kg, estimated

Rat 5628 mg/kg

Other

LD50 Guinea pig 3628.5715 mg/kg, estimated

Hamster 8729.5918 mg/kg, estimated
Monkey 3.0612 g/kg, estimated
Mouse 4183.6733 mg/kg, estimated
Rabbit 1863.2653 mg/kg, estimated

Rat 2174.4897 mg/kg, estimated

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| Components             | Species    | Test Results          |
|------------------------|------------|-----------------------|
| METHYL ALCOHOL (CAS 67 | 7-56-1)    |                       |
| Acute                  |            |                       |
| Dermal                 |            |                       |
| LD50                   | Rabbit     | 15800 mg/kg           |
| Inhalation             |            |                       |
| LC50                   | Cat        | 85.41 mg/l, 4.5 Hours |
|                        |            | 43.68 mg/l, 6 Hours   |
|                        | Rat        | 64000 mg/l, 4 Hours   |
|                        |            | 87.5 mg/l, 6 Hours    |
| Oral                   |            |                       |
| LD50                   | Dog        | 8000 mg/kg            |
|                        | Monkey     | 2 g/kg                |
|                        | Mouse      | 7300 mg/kg            |
|                        | Rabbit     | 14.4 g/kg             |
|                        | Rat        | 5628 mg/kg            |
| Other                  |            |                       |
| LD50                   | Guinea pig | 3556 mg/kg            |
|                        | Hamster    | 8555 mg/kg            |
|                        | Monkey     | 3 g/kg                |
|                        | Mouse      | 4100 mg/kg            |
|                        | Rabbit     | 1826 mg/kg            |
|                        | Rat        | 2131 mg/kg            |
|                        |            |                       |

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Due to lack of data the classification is not possible. Serious eye damage/eye

irritation

Harmful in contact with eyes. Causes serious eye irritation.

**Respiratory sensitization** Due to lack of data the classification is not possible. Skin sensitization Due to lack of data the classification is not possible. Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity

- single exposure

Causes damage to organs. May cause irritation to the respiratory system. Narcotic effects.

Specific target organ toxicity - repeated exposure

Causes damage to organs (central nervous system, visual organs) through prolonged or repeated

**Aspiration hazard** Due to lack of data the classification is not possible.

**Chronic effects** Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause

disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause

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chronic effects. Causes damage to organs through prolonged or repeated exposure.

**Further information** Danger of very serious irreversible effects. Symptoms may be delayed.

### 12. Ecological information

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.

| Product               |                    | Species      | Test Results         |
|-----------------------|--------------------|--------------|----------------------|
| Photovolt Aquatest 2% | % Water Standard ( | CAS Mixture) |                      |
| Crustacea             | EC50               | Daphnia      | 19439 mg/l, 48 hours |
|                       |                    |              | 17143 mg/l, 24 hours |
|                       | LC50               | Daphnia      | 6602 mg/l, 96 hours  |
|                       |                    |              | 4884 mg/l, 24 hours  |
|                       |                    |              | 1777 mg/l, 48 hours  |
| Fish                  | LC50               | Fish         | 23610 mg/l, 72 hours |
|                       |                    |              |                      |

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| Product                     |             | Species  | Test Results                  |
|-----------------------------|-------------|--|-------------------------------|
|                             |             |  | 21480 mg/l, 96 hours          |
|                             |             |  | 20204 mg/l, 24 hours          |
|                             |             |  | 15383 mg/l, 48 hours          |
| Components                  |             | Species  | Test Results                  |
| METHYL ALCOHOL (C           | AS 67-56-1) |  |                               |
| <b>Aquatic</b><br>Crustacea | EC50        | Water flea (Daphnia magna)                           | 20450 - 29350 mg/l, 48 hours  |
|                             |             | , , , , , , , , , , , , , , , , , , ,                | > 10000 mg/l, 24 hours        |
|                             |             |  | > 10000 mg/l, 48 hours        |
|                             |             | Water flea (Daphnia obtusa)                          | 22800 - 24400 mg/l, 24 hours  |
|                             | LC50        | Brine shrimp (Artemia salina)                        | > 10000 mg/l, 24 hours        |
|                             |             | ,  | 703.7 - 1723.9 mg/l, 24 hours |
|                             |             | Cockle (Cerastoderma edule)                          | 3300 - 10000 mg/l, 96 hours   |
|                             |             | ,  | 1000 mg/l, 48 hours           |
|                             |             | Common bay mussel, blue mussel                       | 13400 - 17300 mg/l, 96 hours  |
|                             |             | (Mytilus edulis)                                     | 3, ,                          |
|                             |             | Common shrimp, sand shrimp (Crangon crangon)         | 2500 mg/l, 48 hours           |
|                             |             |  | 1700 mg/l, 96 hours           |
|                             |             | Harpacticoid copepod (Nitocra spinipes)              | 11500 - 12500 mg/l, 96 hours  |
|                             |             | Mussel (Anodonta imbecillis)                         | 37.02 mg/l, 48 hours          |
|                             |             | Oligochaete, worm (Lumbriculus variegatus)           | > 100 mg/l, 96 hours          |
|                             |             | Ramshorn snail (Helisoma trivolvis)                  | > 100 mg/l, 96 hours          |
|                             |             | Scud (Gammarus fasciatus)                            | > 100 mg/l, 96 hours          |
|                             |             | Water flea (Daphnia magna)                           | 3616 - 6414 mg/l, 24 hours    |
|                             |             |  | 2461 - 4395 mg/l, 48 hours    |
|                             |             |  | > 100 mg/l, 96 hours          |
| Fish                        | LC50        | Bleak (Alburnus alburnus)                            | 28000 mg/l, 96 hours          |
|                             |             |  | > 28000 mg/l, 96 hours        |
|                             |             | Bluegill (Lepomis macrochirus)                       | 17400 - 21000 mg/l, 24 hours  |
|                             |             |  | 17300 - 21100 mg/l, 48 hours  |
|                             |             |  | 15510 - 20240 mg/l, 72 hours  |
|                             |             |  | 13500 - 17600 mg/l, 96 hours  |
|                             |             | Carp (Leuciscus idus melanotus)                      | > 10000 mg/l, 48 hours        |
|                             |             | Fathead minnow (Pimephales promelas)                 | 29000 - 30500 mg/l, 24 hours  |
|                             |             |  | 29000 - 30500 mg/l, 48 hours  |
|                             |             |  | 28500 - 30400 mg/l, 96 hours  |
|                             |             |  | 27600 - 29200 mg/l, 72 hours  |
|                             |             | Medaka, high-eyes (Oryzias latipes)                  | 1400 mg/l, 48 hours           |
|                             |             | Rainbow trout, donaldson trout (Oncorhynchus mykiss) | 19800 - 20700 mg/l, 24 hours  |
|                             |             |  | 19500 - 20700 mg/l, 48 hours  |
|                             |             |  | 19500 - 20700 mg/l, 96 hours  |
| Other                       | LC50        | Turbellarian, flatworm (Dugesia tigrina)             | > 100 mg/l, 96 hours          |

 $<sup>\</sup>boldsymbol{\ast}$  Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product. **Bioaccumulative potential** Not available.

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Partition coefficient n-octanol / water (log Kow)

-0.77 METHYL ALCOHOL

Mobility in soil Not available. Other adverse effects Not available.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material

and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

D001: Waste Flammable material with a flash point <140 F Hazardous waste code

Waste from residues / Dispose of in accordance with local regulations. Empty containers or liners may retain some unused products product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions). Avoid discharge into water courses or onto the ground.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

### 14. Transport information

#### DOT

UN1230 **UN number UN proper shipping name** Methanol Transport hazard class(es) 3

Subsidary class(es) Not available.

Packing group

Special precautions for

user

Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, MSDS and emergency procedures before handling.

Labels required

Special provisions IB2, T7, TP2

**Packaging exceptions** 150 Packaging non bulk 202 **Packaging bulk** 242

**IATA** 

UN1230 **UN number UN proper shipping name** Methanol Transport hazard class(es) 3 Subsidary class(es) 6.1 ΙΙ

**Packaging group Environmental hazards** Nο

Labels required Not available.

**ERG Code** 3P

Not available. Special precautions for

user

**TMDG** 

UN1230 **UN number UN proper shipping name METHANOL** 

Transport hazard class(es) 3 Subsidary class(es) 6.1 **Packaging group** TT **Environmental hazards** 

> Marine pollutant No

Labels required Not available. F-E, S-D **EmS** Not available. Special precautions for

user

Transport in bulk according No information available.

to Annex II of MARPOL 73/78 and the IBC Code

Material name: Photovolt Aquatest 2% Water Standard SDS US 2712803 Version #: 01 9 / 11



### IATA; IMDG



# 15. Regulatory information

**US federal regulations** All components are on the U.S. EPA TSCA Inventory List.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

METHYL ALCOHOL (CAS 67-56-1) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

**Hazard categories** Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

**SARA 302 Extremely** 

hazardous substance

**SARA 311/312** No

**Hazardous chemical** 

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

METHYL ALCOHOL (CAS 67-56-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number** 

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

**DEA Exempt Chemical Mixtures Code Number** 

Not regulated.

**Food and Drug Administration (FDA)**  Not regulated.

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause birth defects

or other reproductive harm.

**US. Massachusetts RTK - Substance List** 

METHYL ALCOHOL (CAS 67-56-1)

Material name: Photovolt Aquatest 2% Water Standard SDS US 2712803 Version #: 01 10 / 11

#### **US. New Jersey Worker and Community Right-to-Know Act**

METHYL ALCOHOL (CAS 67-56-1) 500 LBS

#### **US. Pennsylvania RTK - Hazardous Substances**

METHYL ALCOHOL (CAS 67-56-1)

#### **US. Rhode Island RTK**

METHYL ALCOHOL (CAS 67-56-1)

#### **US. California Proposition 65**

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

METHYL ALCOHOL (CAS 67-56-1)

#### **International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |
|                             |  |                        |

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

# 16. Other information, including date of preparation or last revision

**Issue date** February-20-2013

Version # 01

**Further information** Not available.

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge,

> information and belief at the date of its publication. The information given is designed only as a quidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written

based on the best knowledge and experience currently available.

**Revision Information** Product and Company Identification: Synonyms

Hazards Identification: Shared US and Canadian Categories Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties

Transport Information: Proper Shipping Name/Packing Group

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