

AQUARIUM SOLUTIONS® ICH-X®

Hikari Sales USA, Inc.
2230 Davis Court
Hayward, CA 94545-1663
(800) 621-5619
(800) 231-5819 (fax)
fish@hikariusa.com (email)
www.hikariusa.com (website)

Manufactured & Bottled By:
AquaScience Technologies & Research, Inc.
203 Industrial Drive
Richmond, MO 64085-2444
(816) 776-5100
(816) 776-5105 (fax)
troy@aquasciencetech.com (email)
www.aquasciencetech.com (website)

1. Product Identification

Synonyms:

Formalin-Malachite Green Solution

CAS No.:

Mixture.

Molecular Weight:

N/A

Chemical Formula:

N/A

Product Codes:

Hikari: 73214, 73216, 73218

Identified uses:

Disease and water treatment for aquarium fishes.

2. Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302

Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Skin sensitization (Category 1), H317
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 1), H370
For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictograms

Signal word Danger
Hazard statement(s)
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of causing cancer.
Causes damage to organs.

Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/ physician.
Rinse mouth.
If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to an approved waste disposal plant.

3. Composition/Information on Ingredients

Hazardous Components

Ingredient	CAS No	Percent	Hazardous
Formaldehyde	50-00-0	<3%	Yes
Methanol	67-56-1	<1%	Yes
Malachite Green Chloride	569-64-2	0.1%	Yes

SAF-T-DATA^(tm) Ratings:

Health Rating: 3 - Severe (Life)

Flammability Rating: 1 - Slight

Reactivity Rating: 3 - Severe

Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Blue (Health Hazard)

4. First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

no data available

5. Fire Fighting Measures

This product is not considered to be a fire hazard.

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Vapors can accumulate in low areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

7. Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

No smoking.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature above 16°C (60°F) and below 38°C (100°F)

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

8. Exposure Controls/Personal Protection

Components with workplace control parameters

Component CAS Reg. No. Value Control Parameters Basis

Formaldehyde 50-00-0 C 0.3 ppm USA. ACGIH Threshold Limit Values (TLV)

Remarks: Eye & Upper Respiratory Tract irritation; Suspected human carcinogen

Sensitizer

Methanol 67-56-1 Methanol 15 mg/l Urine ACGIH - Biological Exposure Indices (BEI)

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Face shield (8-inch minimum). 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 after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Wash hands before breaks and at the end of workday

9. Physical and Chemical Properties

Appearance

Form: liquid
Color: dark blue-green

Safety data

pH: no data available
Melting point/freezing point: no data available
Boiling point: no data available
Flash point: not applicable
Ignition temperature: no data available
Auto-ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapor pressure: no data available
Specific Gravity: <1.038 at 25 °C (77 °F)
Water solubility: 100%
Partition coefficient:
n-octanol/water no data available
Relative vapour density: no data available
Odor: typical of formaldehyde
Odor Threshold: no data available
Evaporation rate: no data available

10. Stability and Reactivity

Reactivity: no data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: no data available

Conditions to avoid: Heat, cold

Incompatible materials: Strong bases, Acids

Hazardous decomposition products: no data available

Other decomposition products: no data available

In the event of fire: see section 5

11. Toxicological Information

Acute toxicity: no data available

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity:

Mammal: lymphocyte; DNA damage (Malachite Green Chloride)

Hamster Embryo: DNA damage (Malachite Green Chloride)

Carcinogenicity:

IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde).

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. (Malachite Green Chloride).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH (Malachite Green Chloride).

NTP: Known to be human carcinogen (Formaldehyde)

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP (Malachite Green Chloride).

OSHA: OSHA specifically regulated carcinogen (Formaldehyde)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA (Malachite Green Chloride).

Reproductive toxicity: Suspected human reproductive toxicant; no data available (Malachite Green Chloride)

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard no data available

Additional Information:

RTECS: BQ1180000 (Malachite Green Chloride)

Methyl alcohol may be fatal or cause blindness if swallowed., Cannot be made non-poisonous.

Effects due to ingestion may include:, Nausea, Dizziness, Gastrointestinal disturbance, Weakness, Confusion., Drowsiness, Unconsciousness, May cause convulsions.

Malachite Green Chloride; To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence (Formaldehyde)

Stomach - Irregularities - Based on Human Evidence (Methanol)

12. Ecological Information

Toxicity to Fishes

LC₅₀ - *Lepomis macrochirus* - 0.0218 mg/L - 96.0 h

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. Disposal Considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of container and unused contents in accordance with federal, state

and local requirements.

14. Transport Information

DOT (US)

UN number: 2209 Class: 8 Packing group: III
Proper shipping name: Formaldehyde solutions
Reportable Quantity (RQ): 270 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG

UN number: 2209 Class: 8 Packing group: III EMS-No: F-A, S-B
Proper shipping name: FORMALDEHYDE SOLUTION
Marine pollutant: No

IATA

UN number: 2209 Class: 8 Packing group: III

15. Regulatory Information

OSHA Hazards

Target Organ Effect, Irritant

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302: Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-07-01

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-07-01

Methanol, CAS-No. 67-56-1, Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard; Chronic Health Hazard

Massachusetts Right To Know Components

Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-07-01

Methanol, CAS-No. 67-56-1, Revision Date 2007-07-01

Malachite Green Chloride, CAS-No. 569-64-2, Revision Date 1993-04-24

Pennsylvania Right To Know Components

Water, CAS-No. 7732-18-5

Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-07-01

Methanol, CAS-No. 67-56-1, Revision Date 2007-07-01

Malachite Green Chloride, CAS-No. 569-64-2, Revision Date 1993-04-24

New Jersey Right To Know Components

Water, CAS-No. 7732-18-5

Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-07-01

Methanol, CAS-NO. 67-56-1, Revision Date 2007-07-01

Malachite Green Chloride, CAS-No. 569-64-2, Revision Date 1993-04-24

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Formaldehyde, CAS-No. 50-00-0, Revision Date 2007-09-28

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Methanol, CAS-No. 67-56-1, Revision Date 2012-03-16

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Malachite Green Chloride, CAS-No. 569-64-2

16. Other Information

Full text of H-Statements referred to under sections 2 and 3.

Acute Toxicity: Acute toxicity

Aquatic Chronic: Chronic aquatic toxicity

Eye Damage: Serious eye damage

Reproductive: Reproductive toxicity

HMIS Rating

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Physical Hazard 0

NFPA Rating

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Product Use:

Disease and water treatment for aquarium fishes.

Revision Information:

None

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Prepared by: John Farrell Kuhns (Agent for Hikari Sales USA, Inc. and/or AquaScience Technologies & Research, Inc.)
Phone Number: 816-587-9998 (U.S.A.)