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# **1** Identification

- · Product identifier
- · Trade name: 25% w/w MEHQ in Methanol
- · Article number: BAS739
- Details of the supplier of the safety data sheet
  Manufacturer/Supplier: Aqua Solutions, Inc.
  6913 Highway 225 DEER PARK, TX 77536 USA
  800-256-2586

AQUA

- Information department: Technical Coordinator
   Sherman Nelson sherman@aquasolutions.org
   Emergency telephone number:
- *Chemtrec:* 800-424-9300 *Canutec:* 613-996-6666

# 2 Hazard(s) identification

 $\cdot$  Classification of the substance or mixture



Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

*Repr. 2 H361 Suspected of damaging fertility or the unborn child.* 

STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

• *Hazard-determining components of labeling: Methanol (Methyl Alcohol) mequinol* 

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## Trade name: 25% w/w MEHQ in Methanol

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Hazard statements	
Highly flammable liquid and vapor.	
Harmful if swallowed.	
Causes serious eye irritation.	
May cause an allergic skin reaction.	
Suspected of damaging fertility or the unborn child.	
Causes damage to the central nervous system and the visual organs.	
Precautionary statements	
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.	
Keep container tightly closed.	
Ground/bond container and receiving equipment.	
Use explosion-proof electrical/ventilating/lighting/equipment.	
Use only non-sparking tools.	
Take precautionary measures against static discharge.	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Contaminated work clothing must not be allowed out of the workplace.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Call a poison center/doctor if you feel unwell.	
Rinse mouth.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/showe	r
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if presen	
Continue rinsing.	i unu eusy io uo.
IF exposed or concerned: Get medical advice/attention.	
Specific treatment (see on this label).	
If skin irritation or rash occurs: Get medical advice/attention.	
If eye irritation persists: Get medical advice/attention.	
Wash contaminated clothing before reuse.	
In case of fire: Use for extinction: CO2, powder or water spray.	
Store in a well-ventilated place. Keep cool.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulatio	ns.
Classification system:	
NFPA ratings (scale 0 - 4)	
Health = 2	
$\frac{3}{Fire = 3}$	
$\frac{2}{Reactivity} = 0$	

· HMIS-ratings (scale 0 - 4)

HEALTH \*2 Health = \*23 FIRE Fire = 3**REACTIVITY O** Reactivity = 0

• Other hazards

• **Results of PBT and vPvB assessment** • **PBT:** Not applicable. • **vPvB:** Not applicable.

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75.0%

25.0%

## 3 Composition/information on ingredients

#### · Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

#### · Dangerous components:

CAS: 67-56-1 Methanol (Methyl Alcohol)

CAS: 150-76-5 mequinol

#### **4** First-aid measures

#### · Description of first aid measures

• General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

Supply fresh air and to be sure call for a doctor.

- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Immediately call a doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available. • Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

## **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

## 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Environmental precautions: Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

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See Section 8 fo See Section 13 j	<b>her sections</b> or information on safe handling. or information on personal protection equipment. for disposal information. <b>on Criteria for Chemicals</b>	(Contd. of page 3)
· PAC-1:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	530 ppm
CAS: 150-76-5	mequinol	15 mg/m <sup>3</sup>
· PAC-2:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	2,100 ppm
CAS: 150-76-5	mequinol	49 mg/m <sup>3</sup>
· PAC-3:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	7200* ppm
CAS: 150-76-5	mequinol	320 mg/m <sup>3</sup>

## 7 Handling and storage

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
   Store in cool, dry conditions in well sealed receptacles.
   Specific end use(s) No further relevant information available.

# 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

#### · Control parameters

· Comp	ponents with limit values that require monitoring at the workplace:
CAS:	67-56-1 Methanol (Methyl Alcohol)
PEL	Long-term value: 260 mg/m <sup>3</sup> , 200 ppm
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI
	(Contd. on page 5)

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# Safety Data Sheet acc. to OSHA HCS

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#### Trade name: 25% w/w MEHQ in Methanol

CAS:	150-76-5	mequinol
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REL Long-term value: 5 mg/m<sup>3</sup>

TLVLong-term value: 5 mg/m³TWAShort-term value: 5 mg/m³

Long-term value: 5 mg/m<sup>3</sup>

## · Ingredients with biological limit values:

CAS: 67-56-1 Methanol (Methyl Alcohol)

BEI 15 mg/L

LD50 Intraperitoneal: urine Time: end of shift

LD50: Methanol (background, nonspecific)

• Additional information: The lists that were valid during the creation were used as basis.

#### • Exposure controls

· Personal protective equipment:

• General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes. Avoid contact with the eyes and skin.

#### • Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

#### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  $\cdot$  *Material of gloves* 

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

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Trade name: 25% w/w MEHQ in Methanol

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Information on basic physical and c	chemical properties
General Information	
Appearance:	<b>*</b>
Form:	Liquid Classe to Ten Linvid
Color:	Clear to Tan Liquid
· Odor:	Phenol-like Not determined.
Odor threshold:	
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	64.4 °C (147.9 °F)
Flash point:	11 °C (51.8 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	455 °C (851 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	5.5 Vol %
Upper:	44 Vol %
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)
Density at 20 °C (68 °F):	0.73863 g/cm <sup>3</sup> (6.16387 lbs/gal)
Relative density	Not determined.
· Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/wate	er): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	75.0 %
VOC content:	75.00 %
	554.0 g/l / 4.62 lb/gal
Solids content:	25.0 %
Other information	No further relevant information available.

# **10 Stability and reactivity**

• *Reactivity* No further relevant information available.

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: 25% w/w MEHQ in Methanol

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11** Toxicological information

· Information on toxicological effects

• Acute toxicity:

## · LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

 Oral
 LD50
 1,269-2,341 mg/kg (rat)

 Inhalative
 LC50/4h
 171 mg/l (rat)

#### CAS: 67-56-1 Methanol (Methyl Alcohol)

		· •
Oral	LD50	100 mg/kg (ATE)
		300 mg/kg (ATE)
Inhalative	LC50/4h	3 mg/l (ATE)

#### CAS: 150-76-5 mequinol

Oral LD50 500 mg/kg (ATE)

• Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: Irritating effect.

• Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

# **12** Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

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#### Trade name: 25% w/w MEHQ in Methanol

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- Additional ecological information:
- · General notes:
- Water hazard class 2 (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

# **13 Disposal considerations**

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number DOT, IMDG, IATA	UN1993
	0111775
UN proper shipping name	
DOT	Flammable liquids, n.o.s. (Methanol)
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (METHANOL)
Transport hazard class(es)	
DOT	
RAMABLE LOUD	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
	-
Packing group	11
DOT, IMDG, IATA	II
Environmental hazards:	Not applicable.
Special precautions for user Hazard identification number (Keml	Warning: Flammable liquids

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Trade name: 25% w/w MEHQ in Methanol

	(Contd. of page 8)
· EMS Number:	<i>F-E,<u>S-E</u></i>
· Stowage Category	В
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
·DOT	
• Quantity limitations	On passenger aircraft/rail: 1 L
	On cargo aircraft only: 60 L
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (METHANOL), 3, II

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

None of the ingredients is listed.	
Section 313 (Specific toxic chemical listings):	
CAS: 67-56-1 Methanol (Methyl Alcohol)	
TSCA (Toxic Substances Control Act):	
Methanol (Methyl Alcohol)	ACTI
mequinol	ACTI
Hazardous Air Pollutants	
CAS: 67-56-1 Methanol (Methyl Alcohol)	
Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
CAS: 67-56-1 Methanol (Methyl Alcohol)	
Carcinogenic categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	

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# Trade name: 25% w/w MEHQ in Methanol

	(Contd. of page
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
GHS label elements The product is classified and labeled according to the Globally Harm Hazard pictograms	vonized System (GHS).
GHS02 GHS07 GHS08 Signal word Danger	
Hazard-determining components of labeling:	
Methanol (Methyl Alcohol)	
mequinol	
Hazard statements	
Highly flammable liquid and vapor.	
Harmful if swallowed.	
Causes serious eye irritation.	
May cause an allergic skin reaction.	
Suspected of damaging fertility or the unborn child.	
Causes damage to the central nervous system and the visual organs.	
Precautionary statements	
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.	
Keep container tightly closed.	
Ground/bond container and receiving equipment.	
Use explosion-proof electrical/ventilating/lighting/equipment.	
Use only non-sparking tools.	
Take precautionary measures against static discharge.	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Contaminated work clothing must not be allowed out of the workplace.	
Wear protective gloves/protective clothing/eye protection/face protection.	
If swallowed: Call a poison center/doctor if you feel unwell.	
Rinse mouth.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if	present and easy to d
Continue rinsing.	
IF exposed or concerned: Get medical advice/attention.	
Specific treatment (see on this label).	
If skin irritation or rash occurs: Get medical advice/attention.	
If eye irritation persists: Get medical advice/attention.	
Wash contaminated clothing before reuse.	
In case of fire: Use for extinction: CO2, powder or water spray.	
Store in a well-ventilated place. Keep cool.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international reg	zulations.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	

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	s based on our present knowledge. However, this shall not constitute a guarantee for tures and shall not establish a legally valid contractual relationship.
Department issuin	g SDS: Environment protection department.
Contact:	
Date of preparatio	n / last revision
	-2020: Creation date for SDS. STN
	-2020. Creation date for 5DS. 51W
07/27/2020 / -	
Abbreviations and	
	aritime Code for Dangerous Goods
DOT: US Department of	
IATA: International Air	
•	ference of Governmental Industrial Hygienists
	entory of Existing Commercial Chemical Substances
	of Notified Chemical Substances
	ts Service (division of the American Chemical Society)
	rotection Association (USA) vrials Identification System (USA)
VOC: Volatile Organic	
LC50: Lethal concentra	
LD50: Lethal dose, 50	
PBT: Persistent, Bioaco	
,	nd very Bioaccumulative
	ite for Occupational Safety
OSHA: Occupational S	
TLV: Threshold Limit V	
PEL: Permissible Expo	sure Limit
REL: Recommended Ex	posure Limit
BEI: Biological Exposu	re Limit
Flam. Liq. 2: Flammab	
Acute Tox. 4: Acute tox	
	e damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensi	
Repr. 2: Reproductive t	
STOT SE 1: Specific tai	get organ toxicity (single exposure) – Category 1