

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

## 1 Identification

- **Product identifier**
- **Trade name:** Iodoform 50 gpL  
in Chloroform
- **Article number:** OXY067
- **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
- **Information department:**  
Technical Coordinator  
Sherman Nelson sherman@aquasolutions.org
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

- Carc. 2 H351 Suspected of causing cancer.  
 Repr. 2 H361 Suspected of damaging fertility or the unborn child.  
 STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

- Acute Tox. 4 H302 Harmful if swallowed.  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Eye Irrit. 2A H319 Causes serious eye irritation.

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



GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Chloroform  
Iodoform, 99%
- **Hazard statements**  
Harmful if swallowed.  
Causes skin irritation.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 1)

- Causes serious eye irritation.
- Suspected of causing cancer.
- Suspected of damaging fertility or the unborn child.
- Causes damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

- Avoid release to the environment.
- Wear protective gloves / eye protection.
- If swallowed: Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of water.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Store in accordance with local/regional/national/international regulations.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 3  
Fire = 0  
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 67-66-3	Chloroform	96.692%
CAS: 75-47-8	Iodoform, 99%	3.308%

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** 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.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 2)

- **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:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
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.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 67-66-3	Chloroform	2 ppm
--------------	------------	-------

- **PAC-2:**

CAS: 67-66-3	Chloroform	64 ppm
--------------	------------	--------

- **PAC-3:**

CAS: 67-66-3	Chloroform	3,200 ppm
--------------	------------	-----------

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 3)

· **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**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 67-66-3 Chloroform**

PEL Ceiling limit value: 240 mg/m<sup>3</sup>, 50 ppm

REL Short-term value: 9.78\* mg/m<sup>3</sup>, 2\* ppm  
\*60-min; See Pocket Guide App. A

TLV Long-term value: 49 mg/m<sup>3</sup>, 10 ppm

**CAS: 75-47-8 Iodoform, 99%**

REL Long-term value: 10 mg/m<sup>3</sup>, 0.6 ppm

TLV Long-term value: (10) NIC-3.3\* mg/m<sup>3</sup>, (0.6) NIC-0.2\* ppm  
\*inhalable fraction and vapor

· **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 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

· **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.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 4)

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· <b>Form:</b>	Liquid
· <b>Color:</b>	Purple
· <b>Odor:</b>	Chloroform-like
· <b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· <b>Melting point/Melting range:</b>	-63.5 °C (-82.3 °F)
· <b>Boiling point/Boiling range:</b>	Undetermined.

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 982 °C (1,799.6 °F)· **Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapor pressure at 20 °C (68 °F):** 210 hPa (157.5 mm Hg)· **Density at 20 °C (68 °F):** 1.5122 g/cm<sup>3</sup> (12.61931 lbs/gal)· **Relative density** Not determined.· **Vapor density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with**· **Water at 25 °C (77 °F):** 5 g/l· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

· **Solvent content:**

· <b>VOC content:</b>	0.00 % 0.0 g/l / 0.00 lb/gl
-----------------------	--------------------------------

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 5)

**Solids content:** 3.3 %  
**Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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	493 mg/kg
Dermal	LD50	35,790 mg/kg (rat)
Inhalative	LC50/4 h	4,988 mg/l (rat)

**CAS: 67-66-3 Chloroform**

Oral	LD50	500 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **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)**

CAS: 67-66-3	Chloroform	2B
--------------	------------	----

· **NTP (National Toxicology Program)**

CAS: 67-66-3	Chloroform	R
--------------	------------	---

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

US

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 6)


## 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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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.

## 14 Transport information

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, IMDG, IATA</b></li> </ul>                                | <p style="margin: 0;">UN2810</p>  |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> <li>· <b>IMDG, IATA</b></li> </ul> | <p style="margin: 0;">Toxic, liquids, organic, n.o.s. (Chloroform, Iodoform, 99%)<br/>TOXIC LIQUID, ORGANIC, N.O.S.</p>                           |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT</b></li> </ul>                           | <div style="text-align: center; margin-bottom: 10px;">  </div> |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>  | <p style="margin: 0;">6.1 Toxic substances<br/>6.1</p>  |

(Contd. on page 8)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 7)

· **IMDG, IATA**



· <b>Class</b>	6.1 Toxic substances
· <b>Label</b>	6.1
· <b>Packing group</b>	III
· <b>DOT, IMDG, IATA</b>	III
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Warning: Toxic substances
· <b>EMS Number:</b>	F-A,S-A
· <b>Stowage Category</b>	A
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 2810 TOXIC, LIQUIDS, ORGANIC, N.O.S. (CHLOROFORM, IODOFORM, 99%), 6.1, III

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
· **Sara**

· **Section 355 (extremely hazardous substances):**

CAS: 67-66-3	Chloroform
--------------	------------

· **Section 313 (Specific toxic chemical listings):**

CAS: 67-66-3	Chloroform
--------------	------------

· **TSCA (Toxic Substances Control Act):**

Chloroform
------------

Iodoform, 99%
---------------

· **TSCA new (21st Century Act) (Substances not listed)**

CAS: 75-47-8	Iodoform, 99%
--------------	---------------

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 8)

· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 67-66-3	Chloroform
--------------	------------

· **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: 67-66-3	Chloroform
--------------	------------

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 67-66-3	Chloroform	B2, L, NL
--------------	------------	-----------

· **TLV (Threshold Limit Value established by ACGIH)**

CAS: 67-66-3	Chloroform	A3
--------------	------------	----

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 67-66-3	Chloroform
--------------	------------

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

· **Hazard pictograms**



GHS07    GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Chloroform

Iodoform, 99%

· **Hazard statements**

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Avoid release to the environment.

Wear protective gloves / eye protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Store in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

US

(Contd. on page 10)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 12/20/2017

Reviewed on 12/20/2017

**Trade name: Iodoform 50 gpL  
in Chloroform**

(Contd. of page 9)

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing SDS:** Environment protection department.

· **Contact:**

· **Date of preparation / last revision**

12-20-2017: review SDS for accuracy. STN

Creation date for SDS 06-19-2015. STN

12/20/2017 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1