

# Haloacetic Acid Standad

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 31/12/2017

Revision date: \_\_\_\_\_

Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Haloacetic Acid Standad  
Product code : AL0-101534  
Product group : Trade product

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Laboratory Use  
Industrial/Professional use spec : Industrial  
For professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Phenova  
6390 Joyce Dr. Suite 100  
80403 Golden, CO - United States  
T 1-866-942-2978 - F 1-866-283-0269  
[info@phenova.com](mailto:info@phenova.com) - [www.phenova.com](http://www.phenova.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel Assistance (US/Canada) 1-800-255-3924  
ChemTel Assistance (International) +1 813-248-0585

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225  
Skin Irrit. 2 H315

##### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11  
Xi; R38

Full text of R-phrases: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger  
Hazard statements (CLP) : H225 - Highly flammable liquid and vapor  
H315 - Causes skin irritation  
Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P233 - Keep container tightly closed  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

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P332+P313 - If skin irritation occurs: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse  
P370+P378 - In case of fire: Use media other than water to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

EUH phrases : EUH208 - Contains bromoacetic acid(79-08-3). May produce an allergic reaction

EUH phrases

No labeling applicable

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tert-Butyl Methyl Ether (MTBE) (Component)	(CAS No) 1634-04-4 (EC-No.) 216-653-1 (EC index no) 603-181-00-X	99.2	Flam. Liq. 2, H225 Skin Irrit. 2, H315
dichloroacetic acid (Component)	(CAS No) 79-43-6 (EC-No.) 201-207-0 (EC index no) 607-066-00-5	0.1	Skin Corr. 1A, H314 Aquatic Acute 1, H400
bromoacetic acid (Component)	(CAS No) 79-08-3 (EC-No.) 201-175-8 (EC index no) 607-065-00-X	0.1	Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400
chloroacetic acid (Component)	(CAS No) 79-11-8 (EC-No.) 201-178-4 (EC index no) 607-003-00-1	0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10)
trichloroacetic acid (Component)	(CAS No) 76-03-9 (EC-No.) 200-927-2 (EC index no) 607-004-00-7	0.1	Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	Specific concentration limits
chloroacetic acid (Component)	(CAS No) 79-11-8 (EC-No.) 201-178-4 (EC index no) 607-003-00-1	(C >= 5) STOT SE 3, H335
trichloroacetic acid (Component)	(CAS No) 76-03-9 (EC-No.) 200-927-2 (EC index no) 607-004-00-7	(C >= 1) STOT SE 3, H335

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Causes skin irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream.

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### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.  
Explosion hazard : May form flammable/explosive vapor-air mixture.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up in absorbent material. Collect spillage.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.  
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only non-sparking tools.  
Hygiene measures : Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.  
Storage conditions : Keep in fireproof place. Keep container tightly closed. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.  
Incompatible materials : Direct sunlight. Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

dichloroacetic acid (79-43-6)		
Belgium	Limit value (mg/m <sup>3</sup> )	2.7 mg/m <sup>3</sup> (Acide dichloroacétique; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	0.5 ppm (Acide dichloroacétique; Belgium; Time-weighted average exposure limit 8 h)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (Dichloroacetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
chloroacetic acid (79-11-8)		
Belgium	Limit value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (Acide chloroacétique (vapeur et aérosol); Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	0.5 ppm (Acide chloroacétique (vapeur et aérosol); Belgium; Time-weighted average exposure limit 8 h)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (Monochloroacetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1.2 mg/m <sup>3</sup> Monochloroacetic acid; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)

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<b>chloroacetic acid (79-11-8)</b>		
United Kingdom	WEL TWA (ppm)	0.3 ppm Monochloroacetic acid; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
<b>trichloroacetic acid (76-03-9)</b>		
Belgium	Limit value (mg/m <sup>3</sup> )	6.8 mg/m <sup>3</sup> (Acide trichloroacétique; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	1 ppm (Acide trichloroacétique; Belgium; Time-weighted average exposure limit 8 h)
France	VME (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (Acide trichloroacétique; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
France	VME (ppm)	1 ppm (Acide trichloroacétique; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.5 ppm (Trichloroacetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
<b>tert-Butyl Methyl Ether (MTBE) (1634-04-4)</b>		
EU	IOELV TWA (mg/m <sup>3</sup> )	183.5 mg/m <sup>3</sup> (Tertiary-butyl-methyl ether; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV TWA (ppm)	50 ppm (Tertiary-butyl-methyl ether; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
EU	IOELV STEL (mg/m <sup>3</sup> )	367 mg/m <sup>3</sup> (Tertiary-butyl-methyl ether; EU; Short time value; Indicative occupational exposure limit value)
EU	IOELV STEL (ppm)	100 ppm (Tertiary-butyl-methyl ether; EU; Short time value; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m <sup>3</sup> )	146 mg/m <sup>3</sup> (Oxyde de méthyle et de tert-butyle; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	40 ppm (Oxyde de méthyle et de tert-butyle; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Short time value (mg/m <sup>3</sup> )	367 mg/m <sup>3</sup> (Oxyde de méthyle et de tert-butyle; Belgium; Short time value)
Belgium	Short time value (ppm)	100 ppm (Oxyde de méthyle et de tert-butyle; Belgium; Short time value)
France	VLE (mg/m <sup>3</sup> )	367 mg/m <sup>3</sup> (Oxyde de tert-butyle et de méthyle; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VLE (ppm)	100 ppm (Oxyde de tert-butyle et de méthyle; France; Short time value; VRC: Valeur réglementaire contraignante)
France	VME (mg/m <sup>3</sup> )	183.5 mg/m <sup>3</sup> (Oxyde de tert-butyle et de méthyle; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VME (ppm)	50 ppm (Oxyde de tert-butyle et de méthyle; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm (Methyl-tert butyl ether (MTBE); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	180 mg/m <sup>3</sup> (tert-Butylmethylether; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 8H (ppm)	49 ppm (tert-Butylmethylether; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	360 mg/m <sup>3</sup> (tert-Butylmethylether; Netherlands; Short time value; Public occupational exposure limit value)
Netherlands	Grenswaarde TGG 15MIN (ppm)	98 ppm (tert-Butylmethylether; Netherlands; Short time value; Public occupational exposure limit value)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	183.5 mg/m <sup>3</sup> Methyl-tert-butyl-ether or Tertiary-butyl-methyl-ether; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)

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tert-Butyl Methyl Ether (MTBE) (1634-04-4)		
United Kingdom	WEL TWA (ppm)	50 ppm Methyl-tert-butyl-ether or Tertiary-butyl-methyl-ether; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	367 mg/m <sup>3</sup> Methyl-tert-butyl-ether or Tertiary-butyl-methyl-ether; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	100 ppm Methyl-tert-butyl-ether or Tertiary-butyl-methyl-ether; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

### 8.2. Exposure controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.  
Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.



Hand protection : Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration.  
Eye protection : Chemical goggles or safety glasses. Safety glasses.  
Skin and body protection : Wear suitable protective clothing. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.  
Respiratory protection : Wear appropriate mask.  
Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Color : Colorless.  
Odor : characteristic.  
pH : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : Highly flammable liquid and vapor  
Relative density : No data available  
Solubility : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Explosion limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

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### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>dichloroacetic acid (79-43-6)</b>	
LD50 oral rat	2820 mg/kg (Rat)
ATE CLP (oral)	2820 mg/kg body weight

<b>bromoacetic acid (79-08-3)</b>	
LD50 oral rat	50 mg/kg (Rat)
LD50 dermal rat	100 mg/kg (Rat)
LD50 dermal rabbit	60 mg/kg (Rabbit)
ATE CLP (oral)	50 mg/kg body weight
ATE CLP (dermal)	60 mg/kg body weight
ATE CLP (gases)	700 ppmV/4h
ATE CLP (vapors)	3 mg/l/4h
ATE CLP (dust, mist)	0.5 mg/l/4h

<b>chloroacetic acid (79-11-8)</b>	
LD50 oral rat	76 mg/kg (Rat)
LD50 dermal rat	305 mg/kg (Rat)
LD50 dermal rabbit	178 mg/kg (Rabbit)
ATE CLP (oral)	76 mg/kg body weight
ATE CLP (dermal)	178 mg/kg body weight
ATE CLP (gases)	700 ppmV/4h
ATE CLP (vapors)	3 mg/l/4h
ATE CLP (dust, mist)	0.5 mg/l/4h

<b>tert-Butyl Methyl Ether (MTBE) (1634-04-4)</b>	
LD50 oral rat	4000 mg/kg (Rat)
LD50 dermal rat	> 6800 mg/kg (Rat)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	23576 ppm/4h (Rat)
ATE CLP (oral)	4000 mg/kg body weight
ATE CLP (gases)	23576 ppmV/4h
ATE CLP (vapors)	85 mg/l/4h
ATE CLP (dust, mist)	85 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitization	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met May cause cancer
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity – single exposure	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity – repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

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Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>dichloroacetic acid (79-43-6)</b>	
LC50 fish 1	> 0.05 mg/l (LC50)
EC50 Daphnia 1	106 mg/l (EC50)
Threshold limit algae 1	1300 mg/l (EC50; 72 h)
<b>bromoacetic acid (79-08-3)</b>	
EC50 Daphnia 1	65 mg/l (EC50; 24 h)
EC50 other aquatic organisms 1	0.2 mg/l (72 h; Scenedesmus subspicatus; Biomass)
<b>chloroacetic acid (79-11-8)</b>	
LC50 fish 1	369 mg/l (LC50; 96 h)
EC50 Daphnia 1	77 mg/l (EC50; 48 h)
EC50 other aquatic organisms 1	0.033 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
<b>trichloroacetic acid (76-03-9)</b>	
LC50 fish 1	2000 mg/l (LC50; 96 h)
EC50 Daphnia 2	2000 mg/l (EC50; 48 h)
<b>tert-Butyl Methyl Ether (MTBE) (1634-04-4)</b>	
LC50 fish 1	672 - 706 mg/l (LC50; 96 h; Pimephales promelas)
EC50 Daphnia 1	651 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)

#### 12.2. Persistence and degradability

<b>Haloacetic Acid Standad</b>	
Persistence and degradability	Not established.
<b>dichloroacetic acid (79-43-6)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance
<b>bromoacetic acid (79-08-3)</b>	
Persistence and degradability	Biodegradability in water: no data available.
<b>chloroacetic acid (79-11-8)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
ThOD	0.593 g O <sub>2</sub> /g substance
<b>trichloroacetic acid (76-03-9)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>tert-Butyl Methyl Ether (MTBE) (1634-04-4)</b>	
Persistence and degradability	Not readily biodegradable in water.

#### 12.3. Bioaccumulative potential

<b>Haloacetic Acid Standad</b>	
Bioaccumulative potential	Not established.
<b>dichloroacetic acid (79-43-6)</b>	
Log Pow	-0.14 - 1.39
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>bromoacetic acid (79-08-3)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>chloroacetic acid (79-11-8)</b>	
Log Pow	-0.53 - 0.48
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>trichloroacetic acid (76-03-9)</b>	
BCF fish 1	< mg/l 0.4/<1.7,BCF
Log Pow	1.33 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>tert-Butyl Methyl Ether (MTBE) (1634-04-4)</b>	
BCF fish 1	1.5 (BCF; 672 h)
Log Pow	1.06 (Experimental value)

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### tert-Butyl Methyl Ether (MTBE) (1634-04-4)

Bioaccumulative potential : Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

#### dichloroacetic acid (79-43-6)

Surface tension : 0.035 N/m (26 °C)

#### bromoacetic acid (79-08-3)

Surface tension : 0.046 N/m

#### chloroacetic acid (79-11-8)

Surface tension : 0.033 N/m (80 °C)

#### trichloroacetic acid (76-03-9)

Surface tension : 0.278 N/m (80 °C)

### tert-Butyl Methyl Ether (MTBE) (1634-04-4)

Surface tension : 0.02 N/m (20 °C)

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR) : 1993

UN-No. (IATA) : 1993

UN-No. (IMDG) : 1993

UN-No. (ADN) : 1993

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.

Proper Shipping Name (IATA) : Flammable liquid, n.o.s.

Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, N.O.S.

Proper Shipping Name (ADN) : FLAMMABLE LIQUID, N.O.S.

Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II, (D/E)

### 14.3. Packing group

Class (ADR) : 3

Classification code (ADR) : F1

Class (IATA) : 3

Class (IMDG) : 3

Class (ADN) : 3

Classification code (ADN) : F1

Hazard labels (ADR) : 3



Hazard labels (IATA) : 3





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Hazard labels (IMDG) : 3



Hazard labels (ADN) : 3



### 14.4. Packing group

Packing group (ADR) : II  
Packing group (IATA) : II  
Packing group (IMDG) : II  
Packing group (ADN) : II

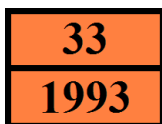
### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33  
Classification code (ADR) : F1  
Orange plates :



Special provision (ADR) : 274, 601, 640D  
Transport category (ADR) : 2  
Tunnel restriction code (ADR) : D/E  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E2

#### 14.6.2. Transport by sea

Special provision (IMDG) : 274  
Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP1, TP8, TP28  
EmS-No. (Fire) : F-E  
EmS-No. (Spillage) : S-E  
Stowage category (IMDG) : B

#### 14.6.3. Air transport

CAO packing instructions (IATA) : 364  
CAO max net quantity (IATA) : 60L  
PCA packing instructions (IATA) : 353  
PCA Limited quantities (IATA) : Y341  
PCA limited quantity max net quantity (IATA) : 1L  
PCA max net quantity (IATA) : 5L  
PCA Excepted quantities (IATA) : E2  
Special provision (IATA) : A3  
ERG code (IATA) : 3H

#### 14.6.4. Inland waterway transport

Special provision (ADN) : 274, 601, 640D  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T

# Haloacetic Acid Standad

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Equipment required (ADN) : PP, EX, A  
Ventilation (ADN) : VE01  
Number of blue cones/lights (ADN) : 1  
Carriage prohibited (ADN) : No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK) : 1 - slightly hazardous to water

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

PHV SDS EU

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