

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

1 Identification

- **Product identifier**
- **Trade name:** Bromine Number Titration Solvent
(Modified w/Toluene)
- **Article number:** 1369
- **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 shermann@aquasolutions.org
- **Emergency telephone number:**
Chemtrec: 800-424-9300
Canutec: 613-996-6666



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Toxicity - Dermal 3

H311 Toxic in contact with skin.



GHS08 Health hazard

Carcinogenicity 1A

H350 May cause cancer.

Toxic to Reproduction 2

H361 Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure 1

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

Specific Target Organ Toxicity - Repeated Exposure 2

H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard 1

H304 May be fatal if swallowed and enters airways.



GHS05 Corrosion

Skin Corrosion 1B

H314 Causes severe skin burns and eye damage.

Eye Damage 1

H318 Causes serious eye damage.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 1)



GHS07

Acute Toxicity - Oral 4

Sensitization - Skin 1

H302 Harmful if swallowed.

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**



GHS02

GHS05

GHS06

GHS07

GHS08

· **Signal word** *Danger*

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

Acetic Acid, Glacial

Methanol

Toluene

Sulfuric Acid 96 - 98%

· **Hazard statements**

*Highly flammable liquid and vapor.**Harmful if swallowed.**Toxic in contact with skin.**Causes severe skin burns and eye damage.**May cause an allergic skin reaction.**May cause cancer.**Suspected of damaging fertility or the unborn child.**Causes damage to the central nervous system and the visual organs.**May cause damage to organs through prolonged or repeated exposure.**May be fatal if swallowed and enters airways.*

· **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 dusts or mists.**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: Immediately call a poison center/doctor.**Specific treatment (see on this label).**If swallowed: Rinse mouth. Do NOT induce vomiting.**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.*

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 2)

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.

Get medical advice/attention if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *3

Fire = 3

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: 64-19-7	Acetic Acid, Glacial	74.77%
CAS: 108-88-3	Toluene	11.998%
CAS: 67-56-1	Methanol	10.956%
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	0.607%

· **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	1.669%
----------------	-------	--------

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.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **After inhalation:**

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

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 3)

- 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. Then consult a doctor.
- **After swallowing:**
Immediately call a doctor.
Drink copious amounts of water and provide fresh air. 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.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **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:**
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.
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).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **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: 64-19-7	Acetic Acid, Glacial	5 ppm
CAS: 108-88-3	Toluene	67 ppm
CAS: 67-56-1	Methanol	530 ppm
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	0.20 mg/m ³

- **PAC-2:**

CAS: 64-19-7	Acetic Acid, Glacial	35 ppm
CAS: 108-88-3	Toluene	560 ppm

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 4)

CAS: 67-56-1	Methanol	2,100 ppm
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	8.7 mg/m ³
· PAC-3:		
CAS: 64-19-7	Acetic Acid, Glacial	250 ppm
CAS: 108-88-3	Toluene	3700* ppm
CAS: 67-56-1	Methanol	7200* ppm
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	160 mg/m ³

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 section 7.*
- **Control parameters**

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

CAS: 64-19-7 Acetic Acid, Glacial	
PEL	Long-term value: 25 mg/m ³ , 10 ppm
REL	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV	Short-term value: 15 ppm Long-term value: 10 ppm
CAS: 108-88-3 Toluene	
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 5)

TLV Long-term value: 20 ppm
BEI, OTO, A4

CAS: 67-56-1 Methanol

PEL Long-term value: 260 mg/m³, 200 ppm

REL Short-term value: 325 mg/m³, 250 ppm
Long-term value: 260 mg/m³, 200 ppm
Skin

TLV Short-term value: 250 ppm
Long-term value: 200 ppm
Skin; BEIc

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

PEL Long-term value: 1 mg/m³

REL Long-term value: 1 mg/m³

TLV Long-term value: 0.2* mg/m³
*as thoracic fraction, A2

· Ingredients with biological limit values:**CAS: 108-88-3 Toluene**

BEI 0.02 mg/L
LD50 Intraperitoneal: blood
Time: prior to last shift of workweek
LD50: Toluene

0.03 mg/L
LD50 Intraperitoneal: urine
Time: end of shift
LD50: Toluene

0.3 mg/g creatinine
LD50 Intraperitoneal: urine
Time: end of shift
LD50: o-Cresol with hydrolysis (background)

CAS: 67-56-1 Methanol

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.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)

(Contd. of page 6)

· **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.

· **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:**

Form:	Liquid
Color:	Colorless
Odor:	Vinegar like
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	64.4 °C (147.9 °F)

· **Flash point:** 4 °C (39.2 °F)

· **Flammability (solid, gaseous):** Highly flammable.

· **Auto igniting:** 455 °C (851 °F)

· **Decomposition temperature:** Not determined.

· **Ignition temperature:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower:	1.2 Vol %
---------------	-----------

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 7)

Upper:	44 Vol %
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)
· Density at 20 °C (68 °F):	0.9681 g/cm ³ (8.07879 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	97.7 %
Water:	1.7 %
VOC content:	97.72 %
	946.1 g/l / 7.90 lb/gal
· Solids content:	0.0 %
· 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	913 mg/kg
Dermal	LD50	934 mg/kg
Inhalative	LC50/4h	27.4 mg/l

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:**
Strong caustic effect.
Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 8)

· **Additional toxicological information:**

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

Toxic

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 108-88-3	Toluene	3
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	I

· **NTP (National Toxicology Program)**

CAS: 7664-93-9	Sulfuric Acid 96 - 98%	K
----------------	------------------------	---

· **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.

· **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.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

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.

US

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS







Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 9)

14 Transport information

· UN-Number	UN2924
· DOT, IMDG, IATA	UN2924
· UN proper shipping name	<i>Flammable liquids, corrosive, n.o.s. (Acetic Acid, Glacial</i>
· DOT	<i>, Methanol, Toluene)</i>
· IMDG, IATA	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (<i>Acetic Acid, Glacial</i> <i>, Methanol, Toluene)</i>
· Transport hazard class(es)	
· DOT	
	
· Class	<i>3 Flammable liquids</i>
· Label	<i>3, 8</i>
· IMDG	
	
· Class	<i>3 Flammable liquids</i>
· Label	<i>3/8</i>
· IATA	
	
· Class	<i>3 Flammable liquids</i>
· Label	<i>3 (8)</i>
· Packing group	<i>II</i>
· DOT, IMDG, IATA	<i>II</i>
· Environmental hazards:	<i>Not applicable.</i>
· Special precautions for user	<i>Warning: Flammable liquids</i>
· Hazard identification number (Kemler code):	<i>338</i>
· EMS Number:	<i>F-E,S-C</i>
· Segregation groups	<i>(SGG1) Acids</i>
· Stowage Category	<i>B</i>
· Stowage Code	<i>SW2 Clear of living quarters.</i>
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	<i>Not applicable.</i>

(Contd. on page 11)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 10)

· Transport/Additional information:

· DOT

· Quantity limitations

On passenger aircraft/rail: 1 L

On cargo aircraft only: 5 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 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ACETIC ACID, GLACIAL, METHANOL, TOLUENE), 3 (8), II

15 Regulatory information

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

· Sara

· Section 355 (extremely hazardous substances):

CAS: 7664-93-9	Sulfuric Acid 96 - 98%
----------------	------------------------

· Section 313 (Specific toxic chemical listings):

CAS: 108-88-3	Toluene
---------------	---------

CAS: 67-56-1	Methanol
--------------	----------

CAS: 7664-93-9	Sulfuric Acid 96 - 98%
----------------	------------------------

· TSCA (Toxic Substances Control Act):

Acetic Acid, Glacial	ACTIVE
----------------------	--------

Toluene	ACTIVE
---------	--------

Methanol	ACTIVE
----------	--------

Water	ACTIVE
-------	--------

Sulfuric Acid 96 - 98%	ACTIVE
------------------------	--------

· Hazardous Air Pollutants

CAS: 108-88-3	Toluene
---------------	---------

CAS: 67-56-1	Methanol
--------------	----------

· 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: 108-88-3	Toluene
---------------	---------

CAS: 67-56-1	Methanol
--------------	----------

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 11)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 108-88-3	Toluene	II
---------------	---------	----

· **TLV (Threshold Limit Value)**

CAS: 108-88-3	Toluene	A4
---------------	---------	----

CAS: 7664-93-9	Sulfuric Acid 96 - 98%	A2
----------------	------------------------	----

· **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 Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS05 GHS06 GHS07 GHS08

· **Signal word** *Danger*

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

Acetic Acid, Glacial

Methanol

Toluene

Sulfuric Acid 96 - 98%

· **Hazard statements**

Highly flammable liquid and vapor.

Harmful if swallowed.

Toxic in contact with skin.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May cause cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to the central nervous system and the visual organs.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· **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 dusts or mists.

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: Immediately call a poison center/doctor.

Specific treatment (see on this label).

If swallowed: Rinse mouth. Do NOT induce vomiting.

(Contd. on page 13)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 12)

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.

Get medical advice/attention if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

In case of fire: Use CO₂, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

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

* 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:

· **Date of preparation / last revision**

Revision 1.2 07/01/2024: Reviewed SDS for accuracy. MH/STN

Revision 0.0, 05-29-2024: Creation date for SDS. STN

07/01/2024 / 1.1

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Acute Toxicity - Dermal 3: Acute toxicity – Category 3

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Eye Damage 1: Serious eye damage/eye irritation – Category 1

(Contd. on page 14)

Safety Data Sheet

acc. to OSHA HCS

Printing date 07/01/2024

Reviewed on 07/01/2024

**Trade name: Bromine Number Titration Solvent
(Modified w/Toluene)**

(Contd. of page 13)

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 1A: Carcinogenicity – Category 1A

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) – Category 1

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

Aspiration Hazard 1: Aspiration hazard – Category 1

· *** Data compared to the previous version altered.**

US