

MSDS Safety Data Sheets



OneDrop® Point of Use Water Purifier

Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 24/08/2014

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

1.1. Product identifier

Product form : Mixture
Product name : OneDrop® Point of Use Water Purifier

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use, Professional use
Use of the substance/mixture : Disinfectant
Water treatment

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ACN Chemicals UK Limited
Second Floor, 27 Gloucester Place
W1U 8HU London - United Kingdom
T +44 (0) 207 193 9114 - F +44 (0) 203 432 4686
contact@acnchemicals.com - www.acnchemicals.com

1.4. Emergency telephone number

Emergency number : 112 (EU)

Country	Organisation/Company	Address	Emergency number
IRELAND (REPUBLIC OF)	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
UNITED KINGDOM	National Poisons Information Service (NHS Direct)	http://www.npis.org	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aquatic Acute 1 H400
Aquatic Chronic 3 H412
Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

N; R51/53
Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS09

Signal word (CLP) : Warning
Hazard statements (CLP) : H400 - Very toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (CLP) : P102 - Keep out of reach of children
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/container to a licensed waste centre in accordance with local/regional/national/international regulations



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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	3-8	O; R8 C; R35
hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-01-X	3-8	C; R34 Xi; R37
copper	(CAS No) 7440-50-8 (EC no) 231-159-6	1 - 2	Not classified
zinc	(CAS No) 7440-66-6 (EC no) 231-175-3 (EC index no) 030-001-01-9	0,5 - 1	N; R50/53
aluminium substance with national workplace exposure limit(s) (AT, BG, DK, ET, HU, IT, LV, PT)	(CAS No) 7429-90-5 (EC no) 231-072-3	< 0,1	Not classified

Name	Product identifier	Specific concentration limits
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	(5 =< C < 20) C;R34 (C >= 20) C;R35 (C >= 70) O;R8
hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-01-X	(10 =< C < 25) Xi;R36/37/38 (C >= 25) C;R34-37

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	3-8	Ox. Liq. 3, H272 Skin Corr. 1A, H314
hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-01-X	3-8	Skin Corr. 1B, H314 STOT SE 3, H335
copper	(CAS No) 7440-50-8 (EC no) 231-159-6	1 - 2	Aquatic Acute 1, H400 (M=10)
zinc	(CAS No) 7440-66-6 (EC no) 231-175-3 (EC index no) 030-001-01-9	0,5 - 1	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
aluminium substance with national workplace exposure limit(s) (AT, BG, DK, ET, HU, IT, LV, PT)	(CAS No) 7429-90-5 (EC no) 231-072-3	< 0,1	Not classified

Name	Product identifier	Specific concentration limits
nitric acid	(CAS No) 7697-37-2 (EC no) 231-714-2 (EC index no) 007-004-00-1	(5 =< C < 20) Skin Corr. 1B, H314 (C >= 20) Skin Corr. 1A, H314 (C >= 65) Ox. Liq. 3, H272
hydrochloric acid	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-01-X	(C >= 10) STOT SE 3, H335 (10 =< C < 25) Eye Irrit. 2, H319 (10 =< C < 25) Skin Irrit. 2, H315 (C >= 25) Skin Corr. 1B, H314

Full text of R- and H-phrases: see section 16

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 you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.



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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible.

5.3. Advice for firefighters

Firefighting instructions : Use extinguishing media appropriate for surrounding fire. 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 substance enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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

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 vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat and ignition sources.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Treatment product for water.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

nitric acid (7697-37-2)		
Austria	MAK Short time value (mg/m ³)	2,6 mg/m ³
Austria	MAK Short time value (ppm)	1 ppm
Belgium	Short time value (mg/m ³)	2,6 mg/m ³
Belgium	Short time value (ppm)	1 ppm
Bulgaria	OEL STEL (mg/m ³)	2,6 mg/m ³
France	VLE (mg/m ³)	2,6 mg/m ³
France	VLE (ppm)	1 ppm



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nitric acid (7697-37-2)		
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	2,6 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (ppm)	1 ppm
Germany	Remark (TRGS 900)	EU,13,16
Greece	OEL STEL (mg/m ³)	2,6 mg/m ³
Greece	OEL STEL (ppm)	1 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	2 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	4 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT & eye irr; dental erosion
Italy	OEL STEL (mg/m ³)	2,6 mg/m ³
Italy	OEL STEL (ppm)	1 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	2 ppm
Switzerland	VLE (mg/m ³)	5 mg/m ³
Switzerland	VLE (ppm)	2 ppm
Switzerland	VME (mg/m ³)	5 mg/m ³
Switzerland	VME (ppm)	2 ppm
Switzerland	Remark (CH)	15 min
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	1,3 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2,6 mg/m ³
United Kingdom	WEL STEL (ppm)	1 ppm
Czech Republic	Expoziční limity (PEL) (mg/m ³)	1 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	0,39 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	2,5 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	1 ppm
Denmark	Grænseværdie (kortvarig) (mg/m ³)	2,6 mg/m ³
Denmark	Grænseværdie (kortvarig) (ppm)	1 ppm
Denmark	Anmærkninger (DK)	ES
Finland	HTP-arvo (8h) (mg/m ³)	1,3 mg/m ³
Finland	HTP-arvo (8h) (ppm)	0,5 ppm
Finland	HTP-arvo (15 min)	2,6 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	1 ppm
Hungary	CK-érték	2,6 mg/m ³
Hungary	Megjegyzések (HU)	i, m; l.
Ireland	OEL (15 min ref) (mg/m ³)	2,6 mg/m ³
Ireland	OEL (15 min ref) (ppm)	1 ppm
Ireland	Notes (IE)	IOELV
Lithuania	TPRV (mg/m ³)	2,6 mg/m ³
Lithuania	TPRV (ppm)	1 ppm
Malta	OEL STEL (mg/m ³)	2,6 mg/m ³
Malta	OEL STEL (ppm)	1 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	5 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	2 ppm
Poland	NDS (mg/m ³)	1,4 mg/m ³
Poland	NDSch (mg/m ³)	2,6 mg/m ³
Romania	OEL STEL (mg/m ³)	2,6 mg/m ³
Romania	OEL STEL (ppm)	1 ppm
Sweden	kortidsvärde (KTV) (mg/m ³)	13 mg/m ³
Sweden	kortidsvärde (KTV) (ppm)	5 ppm



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nitric acid (7697-37-2)		
Australia	TWA (mg/m ³)	5,2 mg/m ³
Australia	TWA (ppm)	2 ppm
Australia	STEL (mg/m ³)	10 mg/m ³
Australia	STEL (ppm)	4 ppm
Portugal	OEL TWA (ppm)	2 ppm
Portugal	OEL STEL (ppm)	4 ppm

hydrochloric acid (7647-01-0)		
EU	IOELV TWA (mg/m ³)	8 mg/m ³
EU	IOELV TWA (ppm)	5 ppm
EU	IOELV STEL (mg/m ³)	15 mg/m ³
EU	IOELV STEL (ppm)	10 ppm
Austria	MAK (mg/m ³)	8 mg/m ³
Austria	MAK (ppm)	5 ppm
Austria	MAK Short time value (mg/m ³)	15 mg/m ³
Austria	MAK Short time value (ppm)	10 ppm
Belgium	Limit value (mg/m ³)	8 mg/m ³
Belgium	Limit value (ppm)	5 ppm
Belgium	Short time value (mg/m ³)	15 mg/m ³
Belgium	Short time value (ppm)	10 ppm
Bulgaria	OEL TWA (mg/m ³)	8 mg/m ³
Bulgaria	OEL STEL (mg/m ³)	15 mg/m ³
France	VLE (mg/m ³)	7,6 mg/m ³
France	VLE (ppm)	5 ppm
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	3 mg/m ³
Germany	TRGS 900 Occupational exposure limit value (ppm)	2 ppm
Germany	Remark (TRGS 900)	DFG,EU,Y
Greece	OEL TWA (mg/m ³)	7 mg/m ³
Greece	OEL TWA (ppm)	5 ppm
Greece	OEL STEL (mg/m ³)	7 mg/m ³
Greece	OEL STEL (ppm)	5 ppm
Italy - Portugal - USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	URT irr
Italy	OEL TWA (mg/m ³)	8 mg/m ³
Italy	OEL TWA (ppm)	5 ppm
Italy	OEL STEL (mg/m ³)	15 mg/m ³
Italy	OEL STEL (ppm)	10 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	7 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm
Switzerland	VLE (mg/m ³)	6 mg/m ³
Switzerland	VLE (ppm)	4 ppm
Switzerland	VME (mg/m ³)	3 mg/m ³
Switzerland	VME (ppm)	2 ppm
Switzerland	Remark (CH)	4x15
Netherlands	Grenswaarde TGG 8H (mg/m ³)	8 mg/m ³
Netherlands	Grenswaarde TGG 15MIN (mg/m ³)	15 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	2 mg/m ³
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m ³)	8 mg/m ³
United Kingdom	WEL STEL (ppm)	5 ppm
Czech Republic	Expoziční limity (PEL) (mg/m ³)	8 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	5,43 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	15 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	10,19 ppm



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hydrochloric acid (7647-01-0)		
Denmark	Grænseværdie (langvarig) (mg/m ³)	7 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	5 ppm
Denmark	Anmærkninger (DK)	EL
Finland	HTP-arvo (15 min)	7,6 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	5 ppm
Hungary	AK-érték	8 mg/m ³
Hungary	CK-érték	16 mg/m ³
Hungary	Megjegyzések (HU)	i, m; EU1
Ireland	OEL (8 hours ref) (mg/m ³)	8 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	5 ppm
Ireland	OEL (15 min ref) (mg/m ³)	15 mg/m ³
Ireland	OEL (15 min ref) (ppm)	10 ppm
Ireland	Notes (IE)	IOELV
Lithuania	IPRV (mg/m ³)	8 mg/m ³
Lithuania	IPRV (ppm)	5 ppm
Lithuania	TPRV (mg/m ³)	15 mg/m ³
Lithuania	TPRV (ppm)	10 ppm
Malta	OEL TWA (mg/m ³)	8 mg/m ³
Malta	OEL TWA (ppm)	5 ppm
Malta	OEL STEL (mg/m ³)	15 mg/m ³
Malta	OEL STEL (ppm)	10 ppm
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	7 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	5 ppm
Norway	Merknader (NO)	T
Poland	NDS (mg/m ³)	5 mg/m ³
Poland	NDSch (mg/m ³)	10 mg/m ³
Romania	OEL TWA (mg/m ³)	8 mg/m ³
Romania	OEL TWA (ppm)	5 ppm
Romania	OEL STEL (mg/m ³)	15 mg/m ³
Romania	OEL STEL (ppm)	10 ppm
Sweden	takgränsvärde (TGV) (mg/m ³)	8 mg/m ³
Sweden	takgränsvärde (TGV) (ppm)	5 ppm
Portugal	OEL - Ceilings (ppm)	2 ppm

aluminium (7429-90-5)		
Austria	MAK (mg/m ³)	10 mg/m ³
Austria	MAK Short time value (mg/m ³)	20 mg/m ³
Bulgaria	OEL TWA (mg/m ³)	2 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Pneumoconiosis; LRT irr
Latvia	OEL TWA (mg/m ³)	2 mg/m ³
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³
Hungary	AK-érték	6 mg/m ³
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	5 mg/m ³
Portugal	OEL TWA (mg/m ³)	10 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation.



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Personal protective equipment : Protective goggles. Gloves.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

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
Colour	: Blue.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 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)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive 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

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.



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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

zinc (7440-66-6)	
LD50 oral rat	> 2000 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; Equivalent or similar to OECD 402)

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : 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

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

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

nitric acid (7697-37-2)	
LC50 fishes 1	25 - 36 mg/l (96 h; <i>Lepomis macrochirus</i>)
LC50 other aquatic organisms 1	180 mg/l (48h) Crustaceans; Portmann, J.E., and K.W. Wilson 1971. The Toxicity of 140 Substances to the Brown Shrimp and Other Marine Animals. Shellfish Information Leaflet No.22 (2nd Ed.), Ministry of Agric.Fish.Food, Fish.Lab.Burnham-on-Crouch, Essex, and Fish Exp.Station Conway, North Wales :12 p.
EC50 Daphnia 1	180 mg/l (48 h; <i>Daphnia magna</i>)
LC50 fish 2	72 ppm (<i>Gambusia affinis</i>)
Threshold limit algae 1	> 19 mg/l (Algae)

hydrochloric acid (7647-01-0)	
LC50 other aquatic organisms 2	250 (240 - 260) mg/l (48h) Crustaceans; Portmann, J.E., and K.W. Wilson 1971. The Toxicity of 140 Substances to the Brown Shrimp and Other Marine Animals. Shellfish Information Leaflet No.22 (2nd Ed.), Ministry of Agric.Fish.Food, Fish.Lab.Burnham-on-Crouch, Essex, and Fish Exp.Station Conway, North Wales :12 p.

zinc (7440-66-6)	
LC50 fishes 1	96h 2,01 (0,182 - 156) mg/l Ismail, P. 1988. Influence of Salinity on the Toxicity of Zinc and Copper to Guppy. Malays.Appl.Biol. 17(1):31-38; Carlson, A.R., and T.H. Roush 1985. Site-Specific Water Quality Studies of the Straight River, Minnesota: Complex Effluent Toxicity, Zinc
LC50 other aquatic organisms 1	48h 0,131 (0,065 - 35) mg/l Crustaceans: Belanger, S.E., and D.S. Cherry 1990. Interacting Effects of pH Acclimation, pH, and Heavy Metals on Acute and Chronic Toxicity to <i>Ceriodaphnia dubia</i> (Cladocera). J.Crustac.Biol. 10(2):225-235
EC50 Daphnia 1	0,07 mg/l (48 h; <i>Daphnia magna</i> ; Zinc ion)
EC50 other aquatic organisms 1	48h 1,33 (0,07 - 4,31) mg/l Crustaceans: Muysen, B.T.A., B.T.A. Bossuyt, and C.R. Janssen 2005. Inter- and Intra-Species Variation in Acute Zinc Tolerance of Field-Collected Cladoceran Populations. Chemosphere 61(8):1159-1167



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zinc (7440-66-6)	
LC50 fish 2	0,169 mg/l (96 h; Oncorhynchus mykiss; Zinc ion)
EC50 Daphnia 2	1,833 mg/l (48 h; Daphnia magna; Zinc ion)
EC50 other aquatic organisms 2	72h 0,713 (0,106 - 2,05) mg/l Algae: De Schampelaere, K.A.C., S. Lofts, and C.R. Janssen 2005. Bioavailability Models for Predicting Acute and Chronic Toxicity of Zinc to Algae, Daphnids, and Fish in Natural Surface Waters. Environ.Toxicol.Chem. 24(5):1190-1197
Threshold limit algae 1	0,03 mg/l (96 h; Selenastrum capricornutum; Zinc ion)
Threshold limit algae 2	0,136 mg/l (72 h; Selenastrum capricornutum; Zinc ion)
copper (7440-50-8)	
LC50 fishes 1	96h 0,665 (0,0087 - 21) mg/l Shariff, M., P.A.H.L. Jayawardena, F.M. Yusoff, and R. Subasinghe 2001. Immunological Parameters of Javanese Carp Puntius gonionotus (Bleeker) Exposed to Copper and Challenged with Aeromonas hydrophila. Fish Shellfish Immunol. 11(4):281-291; Rehwoldt, R., L.W. Menapace, B. Nerrie, and D. Allesandrello 1972. The Effect of Increased Temperature upon the Acute Toxicity of Some Heavy Metal Ions. Bull.Environ.Contam.Toxicol. 8(2):91-96
LC50 other aquatic organisms 1	48h 0,044 (0,00072 - 5,36) mg/l Crustaceans: Lazorchak, J.M. 1987. The Significance of Weight Loss of Daphnia magna Straus During Acute Toxicity Tests with Copper. Ph.D Thesis, Univ.of Texas, Dallas, TX :191 p.
EC50 other aquatic organisms 1	48h 0,02 (0,0016 - 0,34) mg/l Crustaceans; Bossuyt, B.T.A., B.T.A. Muysen, and C.R. Janssen 2005. Relevance of Generic and Site-Specific Species Sensitivity Distributions in the Current Risk Assessment Procedures for Copper and Zinc. Environ.Toxicol.Chem. 24(2):470-478
EC50 other aquatic organisms 2	72h 7,9 (0,04 - 9,2) mg/l Algae: Gatidou, G., and N.S. Thomaidis 2007. Evaluation of Single and Joint Toxic Effects of Two Antifouling Biocides, Their Main Metabolites and Copper Using Phytoplankton Bioassays. Aquat.Toxicol. 85(3):184-191
aluminium (7429-90-5)	
LC50 fishes 1	1,55 (0,12 - 5,2) mg/l Li, X., and F. Zhang 1992. Toxic Effects of Low pH and Elevated Al Concentration on Early Life Stages of Several Species of Freshwater Fishes. Acta Sci.Circumstant.(Huanjing KexueXuebao) 12(1):97-104

12.2. Persistence and degradability

OneDrop® Point of Use Water Purifier	
Persistence and degradability	May cause long-term adverse effects in the environment.

nitric acid (7697-37-2)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

zinc (7440-66-6)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

copper (7440-50-8)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

OneDrop® Point of Use Water Purifier	
Bioaccumulative potential	Not established.

nitric acid (7697-37-2)	
BCF fish 1	<= 1 (Pisces)
Log Pow	-2,3 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)



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nitric acid (7697-37-2)	
Bioaccumulative potential	Bioaccumulation: Not applicable.
zinc (7440-66-6)	
Bioaccumulative potential	Not established.
copper (7440-50-8)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a licensed waste centre in accordance with local/regional/national/international regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 06 03 13* - solid salts and solutions containing heavy metals

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS ; copper(7440-50-8) ; zinc(7440-66-6)), 9, III, (E)

14.3. Transport hazard class(es)

Class (ADR) : 9

Hazard labels (ADR) : 9



14.4. Packing group

Packing group (ADR) : III

14.5. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

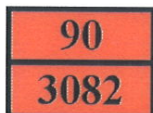
14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90

Classification code (ADR) : M6

Orange plates :





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Special provisions (ADR)	274, 335, 601
Transport category (ADR)	3
Tunnel restriction code (ADR)	: E
Limited quantities (ADR)	5L
Excepted quantities (ADR)	: E1
EAC code	: •3Z

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	OneDrop® Point of Use Water Purifier
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	copper

Contains no REACH candidate substance

15.1.2. National regulations

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

WGK remark : Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

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, labelling 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.

Full text of R-, H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Ox. Liq. 3	Oxidising Liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
R34	Causes burns
R35	Causes severe burns
R37	Irritating to respiratory system
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R8	Contact with combustible material may cause fire



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C	Corrosive
N	Dangerous for the environment
O	Oxidising
Xi	Irritant

SDS EU with modified header & footer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product