

# Neutradol Water Cascade Disinfectant

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 15/12/2017 Revision date: 03/08/2019 Supersedes: 15/12/2017 Version: 1.1

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Neutradol Water Cascade Disinfectant  
Product code : 12RLS  
Vaporizer : Aerosol

#### 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  
Use of the substance/mixture : Disinfectant

##### 1.2.2. Uses advised against

No additional information available

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

M S George Limited  
St. George's House, 13-17 St. George's Road,  
Richmond, Surrey, TW9 2LE - United Kingdom  
T +44(0)20 8332 1515  
Email: [sales@msg.co.uk](mailto:sales@msg.co.uk)

#### 1.4. Emergency telephone number

Emergency number : +44(0)20 8332 1515  
Office hours only.

### SECTION 2: Hazards identification

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

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

Aerosol, Category 1 H222;H229  
Serious eye damage/eye irritation, Category 2 H319  
Full text of H statements : 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) :



GHS02

GHS07

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.  
H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P264 - Wash hands, forearms and face thoroughly after handling.

Child-resistant fastening :

Not applicable

Tactile warning :

Not applicable

#### 2.3. Other hazards

No additional information available

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### 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]
ethanol; ethyl alcohol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	60 - 80	Flam. Liq. 2, H225 Eye Irrit. 2, H319
sodium nitrite	(CAS-No.) 7632-00-0 (EC-No.) 231-555-9 (EC Index-No.) 007-010-00-4 (REACH-no) 01-2119471836-27	0.1 - 1	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
Kampfer substance with national workplace exposure limit(s) (GB)	(CAS-No.) 76-22-2 (EC-No.) 200-945-0 (REACH-no) 01-2119966156-31	< 0.1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 STOT SE 2, H371
Diphenylether substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (GB)	(CAS-No.) 101-84-8 (EC-No.) 202-981-2 (REACH-no) 01-2119472545-33	< 0.1	Not classified

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell. 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	: Give oxygen or artificial respiration if necessary. Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor. Allow affected person to breathe fresh air. Allow the victim to rest. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. 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 cautiously with water for several minutes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects	: Fatal if inhaled.
Symptoms/effects after inhalation	: Inhalation of fumes or vapours may cause respiratory irritation. May be fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Fatal if inhaled.
Symptoms/effects after skin contact	: May cause irritation to skin.
Symptoms/effects after eye contact	: Causes eye irritation.
Symptoms/effects after ingestion	: Ingestion may cause nausea and vomiting.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: Flammable aerosol.
Explosion hazard	: Contains gas under pressure; may explode if heated.

#### 5.3. Advice for firefighters

Precautionary measures fire	: Eliminate all ignition sources if safe to do so.
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Firefighting instructions	: Cool closed containers exposed to fire with water spray. Eliminate all ignition sources if safe to do so. Evacuate area. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Use self-contained breathing apparatus and chemically protective clothing. 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

General measures : Eliminate every possible source of ignition.

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection.

Emergency procedures : Evacuate unnecessary personnel. 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

For containment : No special measures required.

Methods for cleaning up : Take up liquid spill into absorbent material. Store away from other materials.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate air ventilation. Do not breathe fume, vapours, mist.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

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

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### ethanol; ethyl alcohol (64-17-5)

##### United Kingdom - Occupational Exposure Limits

Local name	Ethanol
WEL TWA (mg/m <sup>3</sup> )	1920 mg/m <sup>3</sup>
WEL TWA (ppm)	1000 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

##### Kampfer (76-22-2)

##### United Kingdom - Occupational Exposure Limits

Local name	Bornan-2-one
WEL TWA (mg/m <sup>3</sup> )	13 mg/m <sup>3</sup>
WEL TWA (ppm)	2 ppm
WEL STEL (mg/m <sup>3</sup> )	19 mg/m <sup>3</sup>
WEL STEL (ppm)	3 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

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### Diphenylether (101-84-8)

#### EU - Occupational Exposure Limits

Local name	Diphenyl ether
IOELV TWA (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
IOELV TWA (ppm)	1 ppm
IOELV STEL (mg/m <sup>3</sup> )	14 mg/m <sup>3</sup>
IOELV STEL (ppm)	2 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164

#### United Kingdom - Occupational Exposure Limits

Local name	Diphenyl ether
WEL TWA (mg/m <sup>3</sup> )	7.1 mg/m <sup>3</sup> vapour
WEL TWA (ppm)	1 ppm
WEL STEL (mg/m <sup>3</sup> )	14 mg/m <sup>3</sup>
WEL STEL (ppm)	2 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

### 8.2. Exposure controls

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)		1 (< 4.0)	EN ISO 374

#### Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

#### Personal protective equipment symbol(s):



#### 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	: clear.
Odour	: Fresh.
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

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Solubility	: No data available
Log Pow	: 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

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### ethanol; ethyl alcohol (64-17-5)

LD50 oral rat	10470 mg/kg
LD50 oral	10470 mg/kg bodyweight
LD50 dermal rabbit	15800 mg/kg
LD50 dermal	15800 mg/kg bodyweight
LC50 inhalation rat (mg/l)	30000 mg/l/4h
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 99999 mg/l

#### sodium nitrite (7632-00-0)

LD50 oral	180 mg/kg bodyweight
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#### Kampfer (76-22-2)

LD50 oral	1500 mg/kg bodyweight
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#### Diphenylether (101-84-8)

LD50 oral	2830 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.5 mg/l/4h

Skin corrosion/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

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### ethanol; ethyl alcohol (64-17-5)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

### Neutradol Water Cascade Disinfectant

Vaporizer	Aerosol
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Potential adverse human health effects and symptoms	: Fatal if inhaled.
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## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

### ethanol; ethyl alcohol (64-17-5)

LC50 fish 1	14200 mg/l
EC50 other aquatic organisms 1	5012 mg/l
EC50 other aquatic organisms 2	275 mg/l
EC50 72h algae (1)	275 mg/l

### sodium nitrite (7632-00-0)

LC50 fish 1	0.54 mg/l
EC50 other aquatic organisms 1	15.4 mg/l waterflea

### 12.2. Persistence and degradability

#### Neutradol Water Cascade Disinfectant

Persistence and degradability	Not established.
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### 12.3. Bioaccumulative potential

#### Neutradol Water Cascade Disinfectant

Bioaccumulative potential	Not established.
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### ethanol; ethyl alcohol (64-17-5)

Log Pow	-0.32
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### 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

Additional information	: Avoid release to the environment.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
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Ecology - waste materials	: Hazardous waste due to toxicity. Avoid release to the environment.
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## SECTION 14: Transport information

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

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ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description (ADR)</b>				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

#### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

#### Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg

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Special provisions (IATA) : A145, A167, A802

ERG code (IATA) : 10L

### Inland waterway transport

Classification code (ADN) : 5F

Special provisions (ADN) : 190, 327, 344, 625

Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : E0

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01, VE04

Number of blue cones/lights (ADN) : 1

### Rail transport

Special provisions (RID) : 190, 327, 344, 625

Limited quantities (RID) : 1L

Excepted quantities (RID) : E0

Packing instructions (RID) : P207, LP200

Special packing provisions (RID) : PP87, RR6, L2

Mixed packing provisions (RID) : MP9

Transport category (RID) : 2

Special provisions for carriage – Packages (RID) : W14

Special provisions for carriage - Loading, unloading and handling (RID) : CW9, CW12

Colis express (express parcels) (RID) : CE2

Hazard identification number (RID) : 23

### 14.7. Transport in bulk according to Annex II of Marpol 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 substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

#### 15.1.2. National regulations

No additional information available

### 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 H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
STOT SE 2	Specific target organ toxicity — Single exposure, Category 2



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H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation
H371	May cause damage to organs.
H400	Very toxic to aquatic life.

SDS EU (REACH Annex II)

*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.*