

HALLIBURTON

Product ID: 209694

PRODUCT NAME: Kit Methylene Blue Test 230V

Revision Date: 18-Mar-2019

Revision Number: 2

Contains

Manufacturer/Supplier

Halliburton Energy Services, Inc.

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Telephone: 1-281-871-6107

Prepared By

Chemical Stewardship

Telephone: 1-281-871-6107

e-mail: fdunexchem@halliburton.com

Emergency Telephone Number

1-866-519-4752 or 1-760-476-3962 (accessible 24 hours a day / 7 days a week)

Global Incident Response Access Code: 334305

Contract Number: 14012

Transportation Information

Land Transportation

UN proper shipping name: Not restricted

Transport Hazard Class(es): Not applicable

Packing Group: Not applicable

Environmental Hazards: Not applicable

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

Not applicable

Special precautions for user

None

IMDG/IMO

UN Number Not restricted

UN proper shipping name: Not restricted

Transport Hazard Class(es): Not applicable

Packing Group: Not applicable

Environmental Hazards: Not applicable

IATA/ICAO

UN Number Not restricted

UN proper shipping name: Not restricted

Transport Hazard Class(es): Not applicable

Packing Group: Not applicable

Environmental Hazards: Not applicable

HALLIBURTON

SAFETY DATA SHEET METHYLENE BLUE SOLUTION

according to Regulation (EC) No. 2015/830

Revision Date: 18-Mar-2019
Preparation Date 18-Mar-2019

Revision Number: 17
Internal ID Code HM003986

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

1.1. Product Identifier

Product Name METHYLENE BLUE SOLUTION
Internal ID Code HM003986

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

Recommended Use Reagent

1.3. Details of the supplier of the safety data sheet

Halliburton Energy Services
Halliburton House, Howemoss Place
Kirkhill Industrial Estate
Dyce
Aberdeen, AB21 0GN
United Kingdom
+44 1224 776888

www.halliburton.com

For further information, please contact

E-mail Address: fdunexchem@halliburton.com

1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Global Incident Response Access Code: 334305

Contract Number: 14012

| Emergency telephone - Article 45 - (EC)1272/2008 | |
|--|---|
| Turkey | Ulusal Zehir Danisma Merkezi (UZEM) :114 Acil Saglik Hizmetleri : 112 |
| Europe | 112 |
| Bulgaria | Bulgarian poison centre: +359 2 915-44-09 or +359 2 915-43-46 |
| Croatia | Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health) |
| Cyprus | 00357 22 88 7171 |
| Denmark | Poison Control Hotline (DK): +45 82 12 12 12 |
| France | ORFILA (FR): + 01 45 42 59 59 |
| Germany | Poison Center Berlin (DE): +49 030 30686 790 |
| Israel | Acute poisoning (hotline): 04-7771900 (24/7) |
| Italy | Poison Center, Milan (IT): +39 02 6610 1029 |
| Netherlands | National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals) |
| Norway | Poisons Information (NO):+ 47 22 591300 |
| Poland | Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97 |
| Portugal | CIAV - Centro de Informação Antivenenos (Portuguese Poison Centre): + 351 213 303 271 |
| Romania | +40 21 318 36 06 |
| Spain | Poison Information Service (ES): +34 91 562 04 20 |
| United Kingdom | NHS Direct (UK): +44 0845 46 47 |

SECTION 2: Hazards identification

SAFETY DATA SHEET
METHYLENE BLUE SOLUTION
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2.1. Classification of the substance or mixture
Regulation (EC) No 1272/2008

Not Hazardous

2.2. Label Elements

Not Hazardous

Hazard Pictograms

Signal Word: None

Hazard Statements:
Not Classified

Precautionary Statements:
None

Contains Substances

Contains no hazardous substances in concentrations above cut-off values according to the competent authority

CAS Number
NA

2.3. Other Hazards

None known

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture

| Substances | EINECS | CAS Number | PERCENT (w/w) | EU - CLP Substance Classification | REACH Reg. No |
|--|--------|------------|---------------|-----------------------------------|-------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | NA | 60 - 100% | Not classified | No data available |

For the full text of the H-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin

Wash with soap and water. Get medical attention if irritation persists.

Ingestion

Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

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

No significant hazards expected.

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

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Notes to Physician Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards in a fire

Not applicable

5.3. Advice for firefighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment.

See Section 8 for additional information

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

6.4. Reference to other sections

See Section 8 and 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry location. Keep container closed when not in use.

7.3. Specific end use(s)

Exposure scenario

No information available

Other Guidelines

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Substances | CAS Number | EU | UK | Netherlands | France |
|--|------------|----------------|----------------|----------------|----------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | Not applicable | Not applicable | Not applicable | Not applicable |

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| Substances | CAS Number | Germany | Spain | Portugal | Finland |
|--|------------|----------------|----------------|----------------|----------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Austria | Ireland | Switzerland | Norway |
|--|------------|----------------|----------------|----------------|----------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Italy | Poland | Hungary | Czech Republic |
|--|------------|----------------|----------------|----------------|----------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Denmark | Romania | Croatia | Cyprus |
|--|------------|----------------|----------------|----------------|----------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | Not applicable | Not applicable | Not applicable | Not applicable |

Derived No Effect Level (DNEL) No information available
Worker

General Population

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls

Use in a well ventilated area.

Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

Not normally necessary.

Hand Protection

Impervious rubber gloves.

Skin Protection

Rubber apron.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions

None known.

Environmental Exposure Controls No information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid
Odor: Odorless

Color: Blue
Odor Threshold: No information available

Property

Values

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Remarks/ - Method

| | |
|---|--------------------------|
| pH: | No data available |
| Freezing Point / Range | No data available |
| Melting Point / Range | No data available |
| Pour Point / Range | No data available |
| Boiling Point / Range | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper flammability limit | No data available |
| Lower flammability limit | No data available |
| Evaporation rate | No data available |
| Vapor Pressure | No data available |
| Vapor Density | No data available |
| Specific Gravity | 1 |
| Water Solubility | Soluble in water |
| Solubility in other solvents | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Autoignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity | No data available |
| Explosive Properties | No information available |
| Oxidizing Properties | No information available |

9.2. Other information

VOC Content (%) No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Inhalation

May cause mild respiratory irritation.

Eye Contact

May cause mild eye irritation.

Skin Contact

None known.

Ingestion

Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Toxicology data for the components

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------------------------|------------|-------------------|-------------------|-------------------|
| Contains no hazardous substances in | NA | No data available | No data available | No data available |

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| | | | | |
|--|--|--|--|--|
| concentrations above cut-off values according to the competent authority | | | | |
|--|--|--|--|--|

SECTION 12: Ecological information

12.1. Toxicity

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|--|------------|--------------------------|--------------------------|----------------------------|---------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | No information available | No information available | No information available | No information available |

12.2. Persistence and degradability

| Substances | CAS Number | Persistence and Degradability |
|--|------------|-------------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | No information available |

12.3. Bioaccumulative potential

| Substances | CAS Number | Bioaccumulation |
|--|------------|--------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | No information available |

12.4. Mobility in soil

| Substances | CAS Number | Mobility |
|--|------------|--------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | NA | No information available |

12.5. Results of PBT and vPvB assessment

| Substances | PBT and vPvB assessment |
|--|-------------------------|
| Contains no hazardous substances in concentrations above cut-off values according to the competent authority | Not applicable |

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

Disposal methods

Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging

Follow all applicable national or local regulations.

SECTION 14: Transport information

IMDG/IMO

| | |
|------------------------------------|----------------|
| UN Number | Not restricted |
| UN proper shipping name: | Not restricted |
| Transport Hazard Class(es): | Not applicable |
| Packing Group: | Not applicable |
| Environmental Hazards: | Not applicable |

ADN

| | |
|---------------------------------|----------------|
| UN Number | Not restricted |
| UN proper shipping name: | Not restricted |
| Packing Group | Not applicable |
| Environmental Hazards: | Not applicable |

ADR/RID

| | |
|---------------------------------|----------------|
| UN Number | Not restricted |
| UN proper shipping name: | Not restricted |
| Packing Group | Not applicable |
| Environmental Hazards: | Not applicable |

IATA/ICAO

| | |
|------------------------------------|----------------|
| UN Number | Not restricted |
| UN proper shipping name: | Not restricted |
| Transport Hazard Class(es): | Not applicable |
| Packing Group: | Not applicable |
| Environmental Hazards: | Not applicable |

14.1. UN Number Not restricted

14.2. UN proper shipping name: Not restricted

14.3.

14.4. Packing Group Not applicable

14.5. Environmental Hazards: Not applicable

14.6. Special Precautions for User None

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

International Inventories

US TSCA Inventory

All components listed on inventory or are exempt.

Canadian Domestic Substances List (DSL)

All components listed on inventory or are exempt.

Legend

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TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Not determined
Classes (WGK)

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.
Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

None

Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight

CAS – Chemical Abstracts Service

CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures

EC – European Commission

EC10 – Effective Concentration 10%

EC50 – Effective Concentration 50%

EEC – European Economic Community

ErC50 – Effective Concentration growth rate 50%

IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

LC50 – Lethal Concentration 50%

LD50 – Lethal Dose 50%

LL0 – Lethal Loading 0%

LL50 – Lethal Loading 50%

MARPOL – International Convention for the Prevention of Pollution from Ships

mg/kg – milligram/kilogram

mg/L – milligram/liter

NIOSH – National Institute for Occupational Safety and Health

NOEC – No Observed Effect Concentration

NTP – National Toxicology Program

OEL – Occupational Exposure Limit

PBT – Persistent Bioaccumulative and Toxic

PC – Chemical Product category

PEL – Permissible Exposure Limit

ppm – parts per million

PROC – Process category

REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL – Short Term Exposure Limit

SU – Sector of Use category

Key literature references and sources for data

www.ChemADVISOR.com/

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Revision Note

SDS sections updated:
1

This safety data sheet complies with the requirements of Regulation (EC) No. 2015/830

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet

SAFETY DATA SHEET HYDROGEN PEROXIDE 3% SOLUTION

according to Regulation (EC) No. 2015/830

Revision Date: 18-Mar-2019
Preparation Date 18-Mar-2019

Revision Number: 10
Internal ID Code HM006444

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

1.1. Product Identifier

Product Name HYDROGEN PEROXIDE 3% SOLUTION
Internal ID Code HM006444

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

Recommended Use Reagent

1.3. Details of the supplier of the safety data sheet

FANN Instruments Company
Halliburton House, Howe Moss Crescent
Kirkhill Industrial Estate
Dyce
Aberdeen, AB21 0GN
United Kingdom

Emergency Phone Number: +44 1224 776888

www.halliburton.com

For further information, please contact

E-mail Address: fdunexchem@halliburton.com

1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Global Incident Response Access Code: 334305

Contract Number: 14012

| Emergency telephone - Article 45 - (EC)1272/2008 | |
|--|---|
| Turkey | Ulusal Zehir Danisma Merkezi (UZEM) :114 Acil Saglik Hizmetleri : 112 |
| Europe | 112 |
| Bulgaria | Bulgarian poison centre: +359 2 915-44-09 or +359 2 915-43-46 |
| Croatia | Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health) |
| Cyprus | 00357 22 88 7171 |
| Denmark | Poison Control Hotline (DK): +45 82 12 12 12 |
| France | ORFILA (FR): + 01 45 42 59 59 |
| Germany | Poison Center Berlin (DE): +49 030 30686 790 |
| Israel | Acute poisoning (hotline): 04-7771900 (24/7) |
| Italy | Poison Center, Milan (IT): +39 02 6610 1029 |
| Netherlands | National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals) |
| Norway | Poisons Information (NO):+ 47 22 591300 |
| Poland | Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97 |
| Portugal | CIAV - Centro de Informação Antivenenos (Portuguese Poison Centre): + 351 213 303 271 |
| Romania | +40 21 318 36 06 |
| Spain | Poison Information Service (ES): +34 91 562 04 20 |
| United Kingdom | NHS Direct (UK): +44 0845 46 47 |

SAFETY DATA SHEET
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Revision Number: 10
Internal ID Code HM006444

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|-------------------------------|---------------------|
| Serious Eye Damage/Irritation | Category 2 - (H319) |
|-------------------------------|---------------------|

2.2. Label Elements

Hazard Pictograms



Signal Word: Warning

Hazard Statements:

H319 - Causes serious eye irritation

Precautionary Statements:

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

Contains

Substances

Hydrogen peroxide

CAS Number

7722-84-1

2.3. Other Hazards

None known

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture

| Substances | EINECS | CAS Number | PERCENT (w/w) | EU - CLP Substance Classification | REACH Reg. No |
|-------------------|-----------|------------|---------------|---|-------------------|
| Hydrogen peroxide | 231-765-0 | 7722-84-1 | 1 - 5% | Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Aquatic Chronic 3 (H412) Ox. Liq. 1 (H271) | No data available |

For the full text of the H-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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| | |
|-------------------|--|
| Inhalation | If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult. |
| Eyes | Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention. |
| Skin | In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. |
| Ingestion | Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention. |

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

Causes severe eye irritation which may damage tissue. Causes skin irritation.

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

Notes to Physician Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3. Advice for firefighters

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment.
See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

6.4. Reference to other sections

See Section 8 and 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes, skin, or clothing.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Store away from combustibles. Keep containers oxygenated with air.

7.3. Specific end use(s)

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Exposure scenario No information available
 Other Guidelines No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Substances | CAS Number | EU | UK | Netherlands | France |
|-------------------|------------|----------------|--|----------------|--|
| Hydrogen peroxide | 7722-84-1 | Not applicable | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL: 2 ppm STEL: 2.8 mg/m ³ | Not applicable | TWA: 1 ppm TWA: 1.5 mg/m ³ |

| Substances | CAS Number | Germany | Spain | Portugal | Finland |
|-------------------|------------|--|--|------------|--|
| Hydrogen peroxide | 7722-84-1 | TWA: 0.5 ppm TWA: 0.71 mg/m ³ Peak: 0.5 ppm Peak: 0.71 mg/m ³ | TWA: 1 ppm TWA: 1.4 mg/m ³ | TWA: 1 ppm | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL: 3 ppm STEL: 4.2 mg/m ³ |

| Substances | CAS Number | Austria | Ireland | Switzerland | Norway |
|-------------------|------------|--|---|--|--|
| Hydrogen peroxide | 7722-84-1 | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL" 2 ppm STEL" 2.8 mg/m ³ | 1 ppm TWA; 1.5 mg/m ³ TWA 3 mg/m ³ STEL (as In); 2 ppm STEL | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL: 2 ppm STEL: 2.8 mg/m ³ | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL: 2 ppm STEL: 2.8 mg/m ³ |

| Substances | CAS Number | Italy | Poland | Hungary | Czech Republic |
|-------------------|------------|----------------|---|----------------|--------------------------|
| Hydrogen peroxide | 7722-84-1 | Not applicable | TWA: 0.4 mg/m ³ STEL: 0.8 mg/m ³ | Not applicable | TWA: 1 mg/m ³ |

| Substances | CAS Number | Denmark | Romania | Croatia | Cyprus |
|-------------------|------------|--|----------------|--|----------------|
| Hydrogen peroxide | 7722-84-1 | TWA: 1 ppm TWA: 1.4 mg/m ³ | Not applicable | TWA: 1 ppm TWA: 1.4 mg/m ³ STEL: 2 ppm STEL: 2.8 mg/m ³ | Not applicable |

| Substances | CAS Number | Bulgaria | Turkey |
|-------------------|------------|----------------------------|----------------|
| Hydrogen peroxide | 7722-84-1 | TWA: 1.5 mg/m ³ | Not applicable |

Derived No Effect Level (DNEL) No information available
Worker

General Population

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls

Use in a well ventilated area.

Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Hand Protection
Skin Protection

Impervious rubber gloves.
 Normal work coveralls.

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Eye Protection
Other Precautions

Chemical goggles; also wear a face shield if splashing hazard exists.
Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls No information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid
Odor: Odorless

Color: Clear colorless
Odor Threshold: No information available

Property

Values

Remarks/ - Method

pH:

No data available

Freezing Point / Range

0 °C

Melting Point / Range

No data available

Pour Point / Range

No data available

Boiling Point / Range

100 °C / 212 °F

Flash Point

No data available

Flammability (solid, gas)

No data available

Upper flammability limit

No data available

Lower flammability limit

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

1

Water Solubility

Soluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

Explosive Properties

No information available

Oxidizing Properties

No information available

9.2. Other information

VOC Content (%)

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

Keep away from heat, sparks and flame.

10.5. Incompatible materials

Organic matter. Reducing agents. Strong alkalis. Iron oxide.

10.6. Hazardous decomposition products

Oxygen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Inhalation

May cause mild respiratory irritation.

Eye Contact

Causes severe eye irritation which may damage tissue.

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Skin Contact
Ingestion

Causes skin irritation.
 Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Toxicology data for the components

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------|------------|---------------------------------------|--|-----------------|
| Hydrogen peroxide | 7722-84-1 | 801 mg/kg (Rat) 859.85 mg/kg (Rat) | 4060 mg/kg (Rat) 2000 mg/kg (Rabbit) > 2000 mg/kg (Rabbit) | 2 mg/L (Rat) 4h |

| Substances | CAS Number | Skin corrosion/irritation |
|-------------------|------------|--|
| Hydrogen peroxide | 7722-84-1 | Skin, rabbit: Causes severe skin irritation with tissue destruction. |

| Substances | CAS Number | Serious eye damage/irritation |
|-------------------|------------|--|
| Hydrogen peroxide | 7722-84-1 | Causes severe eye irritation (10 % solution) |

| Substances | CAS Number | Skin Sensitization |
|-------------------|------------|-------------------------------|
| Hydrogen peroxide | 7722-84-1 | Not regarded as a sensitizer. |

| Substances | CAS Number | Respiratory Sensitization |
|-------------------|------------|---------------------------|
| Hydrogen peroxide | 7722-84-1 | No information available |

| Substances | CAS Number | Mutagenic Effects |
|-------------------|------------|---|
| Hydrogen peroxide | 7722-84-1 | In vivo tests did not show mutagenic effects. |

| Substances | CAS Number | Carcinogenic Effects |
|-------------------|------------|--|
| Hydrogen peroxide | 7722-84-1 | While there is some evidence of carcinogenic activity in animals studies, the relevance to humans is questionable. |

| Substances | CAS Number | Reproductive toxicity |
|-------------------|------------|---|
| Hydrogen peroxide | 7722-84-1 | No data of sufficient quality are available. Not regarded as a reproductive and developmental toxicant. |

| Substances | CAS Number | STOT - single exposure |
|-------------------|------------|-----------------------------------|
| Hydrogen peroxide | 7722-84-1 | May cause respiratory irritation. |

| Substances | CAS Number | STOT - repeated exposure |
|-------------------|------------|---|
| Hydrogen peroxide | 7722-84-1 | No significant toxicity observed in animal studies at concentration requiring classification. |

| Substances | CAS Number | Aspiration hazard |
|-------------------|------------|-------------------|
| Hydrogen peroxide | 7722-84-1 | Not applicable |

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity effects

Harmful to aquatic life.

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|-------------------|------------|---|--|----------------------------|---|
| Hydrogen peroxide | 7722-84-1 | EC50 (72h) 2.5 mg/L (Chlorella vulgaris) | LC50 (96h) 16.4 mg/L (Pimephales promelas) LC50: 18-56 mg/L (Lepomis macrochirus) LC50: 10.0-32.0 mg/L | No information available | EC50: 18-32 mg/L EC50 (48h) 2.4 mg/L (Daphnia pulex) NOEC (21d) 0.63 mg/L (Daphnia magna) |

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| | | | |
|--|--|-----------------------|--|
| | | (Oncorhynchus mykiss) | |
|--|--|-----------------------|--|

12.2. Persistence and degradability

| Substances | CAS Number | Persistence and Degradability |
|-------------------|------------|-------------------------------|
| Hydrogen peroxide | 7722-84-1 | Readily biodegradable |

12.3. Bioaccumulative potential

| Substances | CAS Number | Bioaccumulation |
|-------------------|------------|-----------------|
| Hydrogen peroxide | 7722-84-1 | -1.57 |

12.4. Mobility in soil

| Substances | CAS Number | Mobility |
|-------------------|------------|--------------------------|
| Hydrogen peroxide | 7722-84-1 | No information available |

12.5. Results of PBT and vPvB assessment

| Substances | PBT and vPvB assessment |
|-------------------|-------------------------|
| Hydrogen peroxide | Not PBT/vPvB |

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods

Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging

Follow all applicable national or local regulations.

SECTION 14: Transport information

IMDG/IMO

UN Number: Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

ADN

UN Number: Not restricted
UN proper shipping name: Not restricted
Packing Group: Not applicable
Environmental Hazards: Not applicable

ADR/RID

UN Number: Not restricted
UN proper shipping name: Not restricted
Packing Group: Not applicable
Environmental Hazards: Not applicable

IATA/ICAO

UN Number: Not restricted

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Revision Number: 10
Internal ID Code HM006444

UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

14.1. UN Number Not restricted

14.2. UN proper shipping name: Not restricted

14.3.

14.4. Packing Group Not applicable

14.5. Environmental Hazards: Not applicable

14.6. Special Precautions for User None

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

International Inventories

US TSCA Inventory All components listed on inventory or are exempt.

Canadian Domestic Substances List All components listed on inventory or are exempt.

(DSL)

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Not determined

Classes (WGK)

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

H271 - May cause fire or explosion; strong oxidizer

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H401 - Toxic to aquatic life

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

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Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight
CAS – Chemical Abstracts Service
CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures
EC – European Commission
EC10 – Effective Concentration 10%
EC50 – Effective Concentration 50%
EEC – European Economic Community
ErC50 – Effective Concentration growth rate 50%
IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL0 – Lethal Loading 0%
LL50 – Lethal Loading 50%
MARPOL – International Convention for the Prevention of Pollution from Ships
mg/kg – milligram/kilogram
mg/L – milligram/liter
NIOSH – National Institute for Occupational Safety and Health
NOEC – No Observed Effect Concentration
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PBT – Persistent Bioaccumulative and Toxic
PC – Chemical Product category
PEL – Permissible Exposure Limit
ppm – parts per million
PROC – Process category
REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL – Short Term Exposure Limit
SU – Sector of Use category

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 18-Mar-2019

Revision Note

SDS sections updated:
2

This safety data sheet complies with the requirements of Regulation (EC) No. 2015/830

Disclaimer Statement

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End of Safety Data Sheet

SAFETY DATA SHEET

Water

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

1.1. Product Identifier

Product Name Water
Internal ID Code HM003858

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

Recommended Use Fluid
Sector of uses SU2 - Mining, (including offshore industries)
Product category(ies) PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific
Process categories PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

1.3. Details of the supplier of the safety data sheet

Halliburton Energy Services
Halliburton House, Howemoss Place
Kirkhill Industrial Estate
Dyce
Aberdeen, AB21 0GN
United Kingdom
+44 1224 776888

www.halliburton.com

For further information, please contact

E-mail Address: fdunexchem@halliburton.com

1.4. Emergency telephone number

+44 8 08 189 0979 / 1-760-476-3961

Global Incident Response Access Code: 334305

Contract Number: 14012

| Emergency telephone - Article 45 - (EC)1272/2008 | |
|--|---|
| Turkey | Ulusal Zehir Danisma Merkezi (UZEM) :114 Acil Saglik Hizmetleri : 112 |
| Europe | 112 |
| Bulgaria | Bulgarian poison centre: +359 2 915-44-09 or +359 2 915-43-46 |
| Croatia | Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health) |
| Cyprus | 00357 22 88 7171 |
| Denmark | Poison Control Hotline (DK): +45 82 12 12 12 |
| France | ORFILA (FR): + 01 45 42 59 59 |
| Germany | Poison Center Berlin (DE): +49 030 30686 790 |
| Israel | Acute poisoning (hotline): 04-7771900 (24/7) |
| Italy | Poison Center, Milan (IT): +39 02 6610 1029 |
| Netherlands | National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals) |
| Norway | Poisons Information (NO):+ 47 22 591300 |
| Poland | Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97 |
| Portugal | CIAV - Centro de Informação Antivenenos (Portuguese Poison Centre): + 351 213 303 271 |

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| | |
|----------------|---|
| Romania | +40 21 318 36 06 |
| Spain | Poison Information Service (ES): +34 91 562 04 20 |
| United Kingdom | NHS Direct (UK): +44 0845 46 47 |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Not classified

2.2. Label Elements

Not classified

Hazard Pictograms

Signal Word: None

Hazard Statements:

Not Classified

Precautionary Statements:

None

Contains Substances

Water

CAS Number

7732-18-5

2.3. Other Hazards

None known

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance

| Substances | EINECS | CAS Number | PERCENT (w/w) | EU - CLP Substance Classification | REACH Reg. No |
|------------|-----------|------------|------------------|--------------------------------------|-------------------|
| Water | 231-791-2 | 7732-18-5 | 60 - 100% | Not classified | No data available |

For the full text of the H-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Under normal conditions, first aid procedures are not required.
Eyes Under normal conditions, first aid procedures are not required.
Skin Under normal conditions, first aid procedures are not required.
Ingestion Under normal conditions, first aid procedures are not required.

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

No significant hazards expected.

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

Notes to Physician Treat symptomatically

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards in a fire

Not applicable

5.3. Advice for firefighters

Special protective equipment for firefighters

Not applicable

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

None known.

See Section 8 for additional information

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Contain spill with sand or other inert materials. Scoop up and remove.

6.4. Reference to other sections

See Section 8 and 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Not applicable.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry location.

7.3. Specific end use(s)

Exposure scenario

No information available

Other Guidelines

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Substances | CAS Number | EU | UK | Netherlands | France |
|------------|------------|----------------|----------------|----------------|----------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Germany | Spain | Portugal | Finland |
|------------|------------|----------------|----------------|----------------|----------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Austria | Ireland | Switzerland | Norway |
|------------|------------|----------------|----------------|----------------|----------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |

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| Substances | CAS Number | Italy | Poland | Hungary | Czech Republic |
|------------|------------|----------------|----------------|----------------|----------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances | CAS Number | Denmark | Romania | Croatia | Cyprus |
|------------|------------|----------------|----------------|----------------|----------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |

Derived No Effect Level (DNEL) No information available
Worker

General Population

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls

None known.

Personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

Not normally necessary.

Hand Protection

Normal work gloves.

Skin Protection

Normal work coveralls.

Eye Protection

Wear safety glasses or goggles to protect against exposure.

Other Precautions

None known.

Environmental Exposure Controls No information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid

Color: Clear

Odor: Odorless

Odor Threshold: No information available

Property

Values

Remarks/ - Method

pH:

7.2

Freezing Point / Range

0 °C

Melting Point / Range

No data available

Pour Point / Range

No data available

Boiling Point / Range

100 °C / 212 °F

Flash Point

No data available

Flammability (solid, gas)

No data available

Upper flammability limit

No data available

Lower flammability limit

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

1

Water Solubility

Soluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

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Explosive Properties Oxidizing Properties

No information available
No information available

9.2. Other information

VOC Content (%) Liquid Density

No data available
8.34 lbs/gal @ 20 C

SECTION 10: Stability and reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Will Not Occur

10.4. Conditions to avoid

None anticipated

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

| | |
|--------------|-------------|
| Inhalation | None known. |
| Eye Contact | None known. |
| Skin Contact | None known. |
| Ingestion | None known. |

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Toxicology data for the components

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------|------------|-------------------|-------------------|-------------------|
| Water | 7732-18-5 | 90000 mg/kg (rat) | No data available | No data available |

| Substances | CAS Number | Skin corrosion/irritation |
|------------|------------|-------------------------------------|
| Water | 7732-18-5 | Not expected to be a skin irritant. |

| Substances | CAS Number | Serious eye damage/irritation |
|------------|------------|-------------------------------------|
| Water | 7732-18-5 | Not expected to be an eye irritant. |

| Substances | CAS Number | Skin Sensitization |
|------------|------------|-------------------------------|
| Water | 7732-18-5 | Not regarded as a sensitizer. |

| Substances | CAS Number | Respiratory Sensitization |
|------------|------------|-------------------------------|
| Water | 7732-18-5 | Not regarded as a sensitizer. |

| Substances | CAS Number | Mutagenic Effects |
|------------|------------|----------------------------|
| Water | 7732-18-5 | Not regarded as mutagenic. |

| Substances | CAS Number | Carcinogenic Effects |
|------------|------------|-------------------------------|
| Water | 7732-18-5 | Not regarded as carcinogenic. |

| Substances | CAS Number | Reproductive toxicity |
|------------|------------|-----------------------|
|------------|------------|-----------------------|

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| | | |
|-------------------|-------------------|--|
| Water | 7732-18-5 | Not regarded as a reproductive and developmental toxicant. |
| Substances | CAS Number | STOT - single exposure |
| Water | 7732-18-5 | None known |

SECTION 12: Ecological information

12.1. Toxicity

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|------------|------------|--------------------------|--------------------------|----------------------------|---------------------------|
| Water | 7732-18-5 | No information available | No information available | No information available | No information available |

12.2. Persistence and degradability

| Substances | CAS Number | Persistence and Degradability |
|------------|------------|-------------------------------|
| Water | 7732-18-5 | No information available |

12.3. Bioaccumulative potential

| Substances | CAS Number | Bioaccumulation |
|------------|------------|--------------------------|
| Water | 7732-18-5 | No information available |

12.4. Mobility in soil

| Substances | CAS Number | Mobility |
|------------|------------|--------------------------|
| Water | 7732-18-5 | No information available |

12.5. Results of PBT and vPvB assessment

| Substances | PBT and vPvB assessment |
|------------|-------------------------|
| Water | Not applicable |

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods
Contaminated Packaging

Bury in a licensed landfill according to federal, state, and local regulations.
Follow all applicable national or local regulations.

SECTION 14: Transport information

IMDG/IMO

| | |
|-----------------------------|----------------|
| UN Number | Not restricted |
| UN proper shipping name: | Not restricted |
| Transport Hazard Class(es): | Not applicable |
| Packing Group: | Not applicable |
| Environmental Hazards: | Not applicable |

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ADN

UN Number Not restricted
UN proper shipping name: Not restricted
Packing Group Not applicable
Environmental Hazards: Not applicable

ADR/RID

UN Number Not restricted
UN proper shipping name: Not restricted
Packing Group Not applicable
Environmental Hazards: Not applicable

IATA/CAO

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

14.1. UN Number Not restricted

14.2. UN proper shipping name: Not restricted

14.3.

14.4. Packing Group Not applicable

14.5. Environmental Hazards: Not applicable

14.6. Special Precautions for User None

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

International Inventories

US TSCA Inventory All components listed on inventory or are exempt.

Canadian Domestic Substances List (DSL) All components listed on inventory or are exempt.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK) Not determined

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2. Chemical safety assessment

SAFETY DATA SHEET

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Preparation Date 18-Mar-2019

Revision Number: 14
Internal ID Code HM003858

No information available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

None

Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight

CAS – Chemical Abstracts Service

CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures

EC – European Commission

EC10 – Effective Concentration 10%

EC50 – Effective Concentration 50%

EEC – European Economic Community

ErC50 – Effective Concentration growth rate 50%

IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

LC50 – Lethal Concentration 50%

LD50 – Lethal Dose 50%

LL0 – Lethal Loading 0%

LL50 – Lethal Loading 50%

MARPOL – International Convention for the Prevention of Pollution from Ships

mg/kg – milligram/kilogram

mg/L – milligram/liter

NIOSH – National Institute for Occupational Safety and Health

NOEC – No Observed Effect Concentration

NTP – National Toxicology Program

OEL – Occupational Exposure Limit

PBT – Persistent Bioaccumulative and Toxic

PC – Chemical Product category

PEL – Permissible Exposure Limit

ppm – parts per million

PROC – Process category

REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL – Short Term Exposure Limit

SU – Sector of Use category

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 18-Mar-2019

Revision Note

SDS sections updated:

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This safety data sheet complies with the requirements of Regulation (EC) No. 2015/830

Disclaimer Statement

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End of Safety Data Sheet