

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

## GasCon III Winterized

Revision Date: 03-Sep-2015

Revision Number: 4

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product Identifier**

Product Name GasCon III Winterized  
Internal ID Code HM007803

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

Recommended Use Cement Additive

**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

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

E-Mail address: [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

**1.4. Emergency telephone number**

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

| Emergency telephone - §45 - (EC)1272/2008 |                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Europe                                    | 112                                                                                                                                           |
| Croatia                                   | Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health) |
| Cyprus                                    | +210 7793777                                                                                                                                  |
| 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                                                                                                  |
| 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                                                        |
| 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**

|                                                      |                   |
|------------------------------------------------------|-------------------|
| Specific Target Organ Toxicity - (Repeated Exposure) | Category 2 - H373 |
|------------------------------------------------------|-------------------|

**2.2. Label Elements**

Hazard Pictograms

**Signal Word****Warning****Hazard Statements**

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

**Precautionary Statements - EU (§28, 1272/2008)**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical attention/advice if you feel unwell

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

**Contains****Substances**

Ethylene glycol

**CAS Number**

107-21-1

**2.3. Other Hazards**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

## SECTION 3: Composition/information on Ingredients

**3.2. Mixtures**

Mixture

| Substances      | EINECS    | CAS Number | PERCENT (w/w) | EU - CLP Substance Classification       | REACH No.        |
|-----------------|-----------|------------|---------------|-----------------------------------------|------------------|
| Ethylene glycol | 203-473-3 | 107-21-1   | 5 - 10%       | Acute Tox. 4 (H302)<br>STOT RE 1 (H372) | 01-2119456816-28 |

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, move victim to fresh air and seek medical attention.

**Eyes**

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin**

Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse.

**Ingestion**

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

**4.2. Most Important symptoms and effects, both acute and delayed**

Prolonged or repeated exposure may cause damage to organs.

**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**

Decomposition in fire may produce harmful gases.

**5.3. Advice for firefighters****Special Protective Equipment for Fire-Fighters**

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. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

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**

Use appropriate protective equipment. Avoid contact with eyes, skin, or clothing. Avoid breathing mist. Avoid breathing vapors. Ensure adequate ventilation. Launder contaminated clothing before reuse. Do NOT consume food, drink, or tobacco in contaminated areas. Wash hands after use.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

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

Keep container closed when not in use. Ensure all containers are labeled. Store in a cool well ventilated area. Product has a shelf life of 6 months.

**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 |
|-----------------|------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Ethylene glycol | 107-21-1   | Not applicable | TWA: 10 mg/m <sup>3</sup><br>TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup> | TWA: 52 mg/m <sup>3</sup><br>TWA: 10 mg/m <sup>3</sup><br>STEL: 104 mg/m <sup>3</sup> | 20 ppm |

| Substances      | CAS Number | Germany                                  | Spain                                                                                                       | Portugal                                                                                | Finland                                                                                 |
|-----------------|------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Ethylene glycol | 107-21-1   | TWA: 10 ppm<br>TWA: 26 mg/m <sup>3</sup> | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>40 ppm STEL<br>[VLA-EC]; 104 mg/m <sup>3</sup><br>STEL [VLA-EC] | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup> | TWA: 20 ppm<br>TWA: 50 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 100 mg/m <sup>3</sup> |

| Substances      | CAS Number | Austria                                                                                | Ireland                                                                                                                     | Switzerland                                                                            | Norway                                                                                                               |
|-----------------|------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Ethylene glycol | 107-21-1   | TWA: 10 ppm<br>TWA: 26 mg/m <sup>3</sup><br>STEL" 20 ppm<br>STEL" 52 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> TWA<br>(particulate); 20 ppm<br>TWA (vapour); 52<br>mg/m <sup>3</sup> TWA (vapour)<br>40 ppm STEL; 104 | TWA: 10 ppm<br>TWA: 26 mg/m <sup>3</sup><br>STEL: 20 ppm<br>STEL: 52 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup><br>TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 104 mg/m <sup>3</sup><br>STEL: 40 ppm |

|                 |            |                                                                                         | mg/m <sup>3</sup> STEL                                                                  |                                                                                         |                                                                                         |
|-----------------|------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Substances      | CAS Number | Italy                                                                                   | Poland                                                                                  | Hungary                                                                                 | Czech Republic                                                                          |
| Ethylene glycol | 107-21-1   | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup> | TWA: 15 mg/m <sup>3</sup><br>STEL: 50 mg/m <sup>3</sup>                                 | TWA: 52 mg/m <sup>3</sup><br>STEL: 104 mg/m <sup>3</sup>                                | TWA: 50 mg/m <sup>3</sup>                                                               |
| Substances      | CAS Number | Denmark                                                                                 | Romania                                                                                 | Croatia                                                                                 | Cyprus                                                                                  |
| Ethylene glycol | 107-21-1   | TWA: 10 ppm<br>TWA: 26 mg/m <sup>3</sup><br>TWA: 10 mg/m <sup>3</sup>                   | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup> | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup> | TWA: 20 ppm<br>TWA: 52 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 104 mg/m <sup>3</sup> |

**Derived No Effect Level (DNEL)**

No information available.

**Worker**

| Substances      | Long-term exposure - systemic effects, Inhalation | Acute / short term exposure - systemic effects, Inhalation | Long-term exposure - local effects, Inhalation | Acute / short term exposure - local effects, Inhalation | Long-term exposure - systemic effects, Dermal | Acute / short term exposure - systemic effects, Dermal | Long-term exposure - local effects, Dermal | Acute / short term exposure - local effects, Dermal | Hazards for the eyes - local effects |
|-----------------|---------------------------------------------------|------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------------------|-----------------------------------------------------|--------------------------------------|
| Ethylene glycol | Not available                                     | Not available                                              | 35 mg/m <sup>3</sup>                           | Not available                                           | 106 mg/kg bw/day                              | Not available                                          | Not available                              | Not available                                       | Not available                        |

**General Population**

| Substances      | Long-term exposure - systemic effects, Inhalation | Acute / short term exposure - systemic effects, Inhalation | Long-term exposure - local effects, Inhalation | Acute / short term exposure - local effects, Inhalation | Long-term exposure - systemic effects, Dermal | Acute / short term exposure - systemic effects, Dermal | Long-term exposure - local effects, Dermal | Acute / short term exposure - local effects, Dermal | Long-term exposure - systemic effects, Oral | Acute / short term exposure - local effects, Oral | Hazards for the eyes - local effects |
|-----------------|---------------------------------------------------|------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------------------|-----------------------------------------------------|---------------------------------------------|---------------------------------------------------|--------------------------------------|
| Ethylene glycol | Not available                                     | Not available                                              | 7 mg/m <sup>3</sup>                            | Not available                                           | 53 mg/kg bw/day                               | Not available                                          | Not available                              | Not available                                       | Not available                               | Not available                                     | Not available                        |

**Predicted No Effect Concentration (PNEC)**

No information available.

| Substances      | Freshwater | Marine water | Intermittent release | Sewage treatment plant | Sediment (freshwater) | Sediment (marine water) | Air           | Soil               | Secondary poisoning |
|-----------------|------------|--------------|----------------------|------------------------|-----------------------|-------------------------|---------------|--------------------|---------------------|
| Ethylene glycol | 10 mg/L    | 1 mg/L       | 10 mg/L              | 199.5 mg/L             | 37 mg/kg sediment dw  | 3.7 mg/kg sediment dw   | Not available | 1.53 mg/kg soil dw | Not available       |

**8.2. Exposure controls****Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**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 needed. But if significant exposures are possible then the following respirator is recommended:

**Hand Protection**

Organic vapor respirator with a dust/mist filter. (A2P2/P3)

**Skin Protection**

Impervious rubber gloves. Butyl rubber gloves. Viton gloves Polyvinylchloride gloves.

**Eye Protection**

Rubber apron.  
Splashproof chemical monogoggles or safety glasses with side shields in conjunction with a face shield.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**Environmental Exposure Controls** Do not allow material to contaminate ground water system**SECTION 9: Physical and Chemical Properties****9.1. Information on basic physical and chemical properties**

**Physical State:** Liquid  
**Odor:** Slight

**Color:** Clear to hazy  
**Odor Threshold:** No information available

Property

Values

Remarks/ - Method

|                                        |                          |
|----------------------------------------|--------------------------|
| pH:                                    | 9 - 11                   |
| Freezing Point/Range                   | < 0 °C                   |
| Melting 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                         | 15                       |
| Vapor Density                          | No data available        |
| Specific Gravity                       | 1.10 - 1.11              |
| Water Solubility                       | Dispersible              |
| 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

Excessive heat

10.5. Incompatible Materials

Strong oxidizers. Mild steel. Prolonged contact with aluminum. Contact with copper.

10.6. Hazardous Decomposition Products

Oxides of nitrogen. Oxides of sulfur. Carbon monoxide and carbon dioxide.

**SECTION 11: Toxicological Information**11.1. Information on Toxicological Effects**Acute Toxicity****Inhalation**

May cause respiratory irritation. Vapors given off by heated product may be harmful.  
May cause Central Nervous System effects.

**Eye Contact**

May cause eye irritation.

**Skin Contact**

May cause mild skin irritation. May be absorbed through the skin.

**Ingestion**

May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions. May cause liver and kidney damage.

**Chronic Effects/Carcinogenicity**

Prolonged or repeated exposure may cause liver, heart, blood and brain damage.  
Prolonged or repeated exposure may cause embryo and fetus toxicity. Prolonged or repeated exposure may cause reproductive system damage. Prolonged or repeated exposure may cause kidney damage.

Toxicology data for the components

| Substances      | CAS Number | LD50 Oral                                                                                                    | LD50 Dermal                                 | LC50 Inhalation                               |
|-----------------|------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------|-----------------------------------------------|
| Ethylene glycol | 107-21-1   | 4000 mg/kg (Rat)<br>7712 mg/kg (Rat)<br>> 10000 mg/kg (Rat)<br>1670 mg/kg (Cat)<br>1400 – 1600 mg/kg (Human) | 9530 µL/kg (Rabbit)<br>> 3500 mg/kg (Mouse) | > 2.5 mg/L (Rat) 6h (saturated concentration) |

| Substances      | CAS Number | Skin corrosion/irritation                                                                                                                  |
|-----------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Ethylene glycol | 107-21-1   | Non-irritating to the skin (Rabbit)                                                                                                        |
| Substances      | CAS Number | Eye damage/irritation                                                                                                                      |
| Ethylene glycol | 107-21-1   | Non-irritating to the eye (Rabbit)                                                                                                         |
| Substances      | CAS Number | Skin Sensitization                                                                                                                         |
| Ethylene glycol | 107-21-1   | Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did not demonstrate sensitization properties |
| Substances      | CAS Number | Respiratory Sensitization                                                                                                                  |
| Ethylene glycol | 107-21-1   | No information available                                                                                                                   |
| Substances      | CAS Number | Mutagenic Effects                                                                                                                          |
| Ethylene glycol | 107-21-1   | In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.                                               |
| Substances      | CAS Number | Carcinogenic Effects                                                                                                                       |
| Ethylene glycol | 107-21-1   | Did not show carcinogenic effects in animal experiments                                                                                    |
| Substances      | CAS Number | Reproductive toxicity                                                                                                                      |
| Ethylene glycol | 107-21-1   | Fetotoxic and teratogenic effects observed in experimental animals at concentrations that did not produce maternal toxicity.               |
| Substances      | CAS Number | STOT - single exposure                                                                                                                     |
| Ethylene glycol | 107-21-1   | No significant toxicity observed in animal studies at concentration requiring classification.                                              |
| Substances      | CAS Number | STOT - repeated exposure                                                                                                                   |
| Ethylene glycol | 107-21-1   | Causes damage to organs through prolonged or repeated exposure: (Kidney)                                                                   |
| Substances      | CAS Number | Aspiration hazard                                                                                                                          |
| Ethylene glycol | 107-21-1   | No information available                                                                                                                   |

## SECTION 12: Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

| Substances      | CAS Number | Toxicity to Algae                                                                                           | Toxicity to Fish                                                                                                                               | Toxicity to Microorganisms                                                                                              | Toxicity to Invertebrates                                                                                                          |
|-----------------|------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Ethylene glycol | 107-21-1   | EC50 6500 - 13000 mg/L (Pseudokirchneriella subcapitata)<br>TGK (8d) > 10000 mg/L (Scenedesmus quadricauda) | LC50 41000 mg/L (Oncorhynchus mykiss)<br>LC50 (96h) 72860 mg/L (Pimephales promelas)<br>NOEC (7d) 15380 mg/L (mortality) (Pimephales promelas) | TTC (16h) > 10000 mg/L (Pseudomonas putida)<br>EC20 (30 m) > 1995 mg/L (activated sludge, domestic) (similar substance) | EC50 46300 mg/L (Daphnia magna)<br>EC50 (48h) >100 mg/L (Daphnia magna)<br>NOEC (7d) 8590 mg/L (reproduction) (Ceriodaphnia dubia) |

### 12.2. Persistence and degradability

| Substances      | CAS Number | Persistence and Degradability      |
|-----------------|------------|------------------------------------|
| Ethylene glycol | 107-21-1   | Readily biodegradable (100% @ 10d) |

### 12.3. Bioaccumulative potential

| Substances      | CAS Number | Log Pow |
|-----------------|------------|---------|
| Ethylene glycol | 107-21-1   | -1.36   |

**12.4. Mobility in soil**

| Substances      | CAS Number | Mobility                 |
|-----------------|------------|--------------------------|
| Ethylene glycol | 107-21-1   | No information available |

**12.5. Results of PBT and vPvB assessment**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

| Substances      | PBT and vPvB assessment |
|-----------------|-------------------------|
| Ethylene glycol | 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 Method**

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 |

**RID**

|                             |                |
|-----------------------------|----------------|
| UN Number:                  | Not restricted |
| UN Proper Shipping Name:    | Not restricted |
| Transport Hazard Class(es): | Not applicable |
| Packing Group:              | Not applicable |
| Environmental Hazards:      | Not applicable |

**ADR**

|                             |                |
|-----------------------------|----------------|
| 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 |

**14.1. UN Number:** Not restricted

**14.2. UN Proper Shipping Name:** Not restricted

**14.3. Transport Hazard Class(es):** Not applicable

**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****EINECS Inventory**

This product, and all its components, complies with EINECS

**US TSCA Inventory**

All components listed on inventory or are exempt.

**Canadian DSL Inventory**

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/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**Germany, Water Endangering  
Classes (WGK)**

WGK 1: Low hazard to waters.

**15.2. Chemical Safety Assessment**

No information available

**SECTION 16: Other Information****Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed

H372 - Causes damage to organs through prolonged or repeated exposure

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

**Key or legend to abbreviations and acronyms**

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/](http://www.ChemADVISOR.com/)**Revision Date:**

03-Sep-2015

**Revision Note**

Not applicable

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010**

**Disclaimer Statement**

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**End of Safety Data Sheet**