

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

## CRYSTALSEAL

Revision Date: 07-Dec-2012

Revision Number: 5

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name CRYSTALSEAL

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

Recommended Use 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

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

[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 1224 795277 or +1 281 575 5000

#### Emergency telephone - §45 - (EC)1272/2008

|                |   |
|----------------|---|
| Europe         | 112   |
| 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                                  |
| Spain          | Poison Information Service (ES): +34 91 562 04 20   |
| United Kingdom | NHS Direct (UK): +44 0845 46 47   |

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not classified

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

Classification Not Classified  
Risk Phrases None

**2.2 Label Elements**

Not classified

**Hazard Pictograms****Signal Word** **None****Hazard Statements**

Not Classified

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

Not Classified

**Contains****Substances**

Acrylamide copolymer

**CAS Number**

9003-05-8

**2.3 Other Hazards**

Dust can form an explosive mixture in air

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Substances           | EINECS         | CAS Number | PERCENT (w/w) | EEC Classification | EU - CLP Substance Classification | REACH No.         |
|----------------------|----------------|------------|---------------|--------------------|-----------------------------------|-------------------|
| Acrylamide copolymer | Not applicable | 9003-05-8  | 60 - 100%     | Not applicable     | Not applicable                    | No data available |

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

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.    |
| <b>Eyes</b>       | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists. |
| <b>Skin</b>       | Wash with soap and water. Get medical attention if irritation persists.   |
| <b>Ingestion</b>  | 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

**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 toxic gases. Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

**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.

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Slippery when wet. Use appropriate protective equipment. Avoid creating and breathing dust. 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**

Scoop up and remove.

**6.4 Reference to other sections**

See Section 8 and 13 for additional information.

**7. HANDLING AND STORAGE****7.1 Precautions for Safe Handling**

Avoid creating or inhaling dust. Wash hands after use. Slippery when wet.

**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. Store between 40.5 F (4.7 C) and 120.5 F (49 C). Store away from direct sunlight. Product has a shelf life of 60 months.

**7.3 Specific End Use(s)**

|                          |                          |
|--------------------------|--------------------------|
| <b>Exposure Scenario</b> | No information available |
| <b>Other Guidelines</b>  | No information available |

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Exposure Limits**

| Substances           | CAS Number | EU             | UK OEL         | Netherlands    | France OEL     |
|----------------------|------------|----------------|----------------|----------------|----------------|
| Acrylamide copolymer | 9003-05-8  | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances           | CAS Number | Germany MAK/TRK | Spain          | Portugal       | Finland        |
|----------------------|------------|-----------------|----------------|----------------|----------------|
| Acrylamide copolymer | 9003-05-8  | Not applicable  | Not applicable | Not applicable | Not applicable |

| Substances           | CAS Number | Austria        | Ireland        | Switzerland    | Norway         |
|----------------------|------------|----------------|----------------|----------------|----------------|
| Acrylamide copolymer | 9003-05-8  | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances           | CAS Number | Italy          | Poland         | Hungary        | Czech Republic |
|----------------------|------------|----------------|----------------|----------------|----------------|
| Acrylamide copolymer | 9003-05-8  | Not applicable | Not applicable | Not applicable | Not applicable |

| Substances           | CAS Number |  | Denmark        |
|----------------------|------------|--|----------------|
| Acrylamide copolymer | 9003-05-8  |  | Not applicable |

**Derived No Effect Level (DNEL)****Worker**

No information available.

**General Population****Predicted No Effect Concentration (PNEC)**

No information available.

**8.2 Exposure controls****Engineering Controls****Personal protective equipment****Respiratory Protection**

A well ventilated area to control dust levels.

Not normally needed. But if significant exposures are possible then the following respirator is recommended:

Dust/mist respirator. (N95, P2/P3)

Normal work gloves.

Normal work coveralls.

Wear safety glasses or goggles to protect against exposure.

Wear safety glasses or goggles to protect against exposure.

**Other Precautions** None known.  
**Environmental Exposure Controls** No information available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|   |                          |                        |                          |
|---|--------------------------|------------------------|--------------------------|
| <b>Physical State:</b>                        | Granules and Powder      | <b>Color:</b>          | Off white                |
| <b>Odor:</b>                                  | Odorless                 | <b>Odor Threshold:</b> | No information available |
| <b>Property</b>                               | <b>Values</b>            |                        |                          |
| <b>Remarks/ - Method</b>                      |                          |                        |                          |
| <b>pH:</b>                                    | 6.5-7.5                  |                        |                          |
| <b>Freezing Point/Range</b>                   | No data available        |                        |                          |
| <b>Melting Point/Range</b>                    | No data available        |                        |                          |
| <b>Boiling Point/Range</b>                    | No data available        |                        |                          |
| <b>Flash Point</b>                            | No data available        |                        |                          |
| <b>Evaporation rate</b>                       | No data available        |                        |                          |
| <b>Vapor Pressure</b>                         | No data available        |                        |                          |
| <b>Vapor Density</b>                          | No data available        |                        |                          |
| <b>Specific Gravity</b>                       | 0.66                     |                        |                          |
| <b>Water Solubility</b>                       | Soluble in water         |                        |                          |
| <b>Solubility in other solvents</b>           | No data available        |                        |                          |
| <b>Partition coefficient: n-octanol/water</b> | No data available        |                        |                          |
| <b>Autoignition Temperature</b>               | No data available        |                        |                          |
| <b>Decomposition Temperature</b>              | No data available        |                        |                          |
| <b>Viscosity</b>                              | No data available        |                        |                          |
| <b>Explosive Properties</b>                   | No information available |                        |                          |
| <b>Oxidizing Properties</b>                   | No information available |                        |                          |

### 9.2 Other information

|                        |                   |
|------------------------|-------------------|
| <b>VOC Content (%)</b> | No data available |
|------------------------|-------------------|

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Not applicable

### 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

Strong oxidizers.

### 10.6 Hazardous Decomposition Products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects

#### Acute Toxicity

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause mild respiratory irritation. |
| <b>Eye Contact</b>  | May cause mild eye irritation.         |
| <b>Skin Contact</b> | May cause mild skin irritation.        |
| <b>Ingestion</b>    | None known                             |

**Chronic Effects/Carcinogenicity** No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

### Toxicology data for the components

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------|------------|-----------|-------------|-----------------|
|            |            |           |             |                 |

|                      |           |                |                   |                   |
|----------------------|-----------|----------------|-------------------|-------------------|
| Acrylamide copolymer | 9003-05-8 | 1 g/kg ( Rat ) | No data available | No data available |
|----------------------|-----------|----------------|-------------------|-------------------|

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

#### Ecotoxicity Effects

| Substances           | CAS Number | Toxicity to Algae                            | Toxicity to Fish                        | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|----------------------|------------|--|---|----------------------------|----------------------------|
| Acrylamide copolymer | 9003-05-8  | EC50: > 500 mg/l (Selenastrum capricornutum) | TLM96: >1000 mg/l (Pimephales promelas) | No information available   | No information available   |

### 12.2 Persistence and degradability

Not readily biodegradable

### 12.3 Bioaccumulative potential

Does not bioaccumulate

### 12.4 Mobility in soil

No information available

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

|                        |   |
|------------------------|---|
| Disposal Method        | Bury in a licensed landfill according to federal, state, and local regulations. |
| Contaminated Packaging | Follow all applicable national or local regulations.                            |

## 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 hazard:** Not applicable

**ADR**

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental hazard:** 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 hazard:** Not applicable

**Special Precautions for User** None

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable

## 15. REGULATORY INFORMATION

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

**International Inventories**

**All of the components in the product are on the following Inventory lists:** All of the components in the product are on the following Inventory lists.:

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

**Germany, Water Endangering Classes (WGK)** WGK 2: Hazard to waters.

### 15.2 Chemical Safety Assessment

No information available

## 16. OTHER INFORMATION

**Full text of R-phrases referred to under Sections 2 and 3**

None

**Key literature references and sources for data**

www.ChemADVISOR.com/

**Revision Date:** 07-Dec-2012

**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**