

# SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

## STEELSEAL® G 100

Revision Date: 02-Mar-2012

Revision Number: 1

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product Identifier

Product Name STEELSEAL® G 100

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

Recommended Use Loss Circulation Material

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

Halliburton Manufacturing Services, Ltd.  
Halliburton House, Howemoss Crescent  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

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

www.halliburton.com

For further information, please contact

E-Mail address: 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**

Graphite

**CAS Number**

7782-42-5

**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.
Graphite	231-955-3	7782-42-5	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****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. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

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

May cause mild eye, skin, and respiratory irritation.

**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**

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**

Not applicable.

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

Not applicable.

## 6. Accidental release measures

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

Use appropriate protective equipment. Avoid creating and breathing dust.  
See Section 8 for additional information

### 6.2 Environmental precautions

None known.

### 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. Avoid dust accumulations. Wet activated carbon removes oxygen from air causing a severe hazard to workers inside carbon vessels and enclosed or confined spaces. Before entering such an area, sampling and dark procedures for low oxygen levels should be taken to ensure ample oxygen availability.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

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

Store away from oxidizers. Store in a dry location. Keep from heat, sparks, and open flames. Product has a shelf life of 60 months.

### 7.3 Specific End Use(s)

**Exposure Scenario** No information available

**Other Guidelines** No information available

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Exposure Limits

Substances	CAS Number	EU	UK OEL	Netherlands	France OEL
Graphite	7782-42-5	Not applicable	STEL: 30 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>	Not applicable	2 mg/m <sup>3</sup>

Substances	CAS Number	Germany MAK/TRK	Spain	Portugal	Finland
Graphite	7782-42-5	MAK: 1.5 mg/m <sup>3</sup> MAK: 4 mg/m <sup>3</sup>	VLA-ED: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Graphite	7782-42-5	Not applicable	Not applicable	Not applicable	STEL: 10 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> STEL: 8 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Graphite	7782-42-5	Not applicable	NDS: 4.0 mg/m <sup>3</sup> NDS: 1.0 mg/m <sup>3</sup> NDS: 6.0 mg/m <sup>3</sup>	Not applicable	TWA: 2.0 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>

Substances	CAS Number	Denmark
Graphite	7782-42-5	TWA: 2.5 mg/m <sup>3</sup>

**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**

A well ventilated area to control dust levels.

**Personal protective equipment****Respiratory Protection**

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

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

**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**9. Physical and Chemical Properties****9.1 Information on basic physical and chemical properties****Physical State:** Solid**Color:** Dark gray**Odor:** Odorless**Odor Threshold:** No information availablePropertyValuesRemarks/ - Method**pH:**

No data available

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

4200 °C

**Flash Point**

No data available

**Evaporation rate**

No data available

**Vapor Pressure**

No data available

**Vapor Density**

No data available

**Specific Gravity**

1.5

**Water Solubility**

Insoluble 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

**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 acids. Strong alkalis.

**10.6 Hazardous Decomposition Products**

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 eye irritation
<b>Skin Contact</b>	May cause mild skin irritation.
<b>Ingestion</b>	May cause mild gastric distress.

**Chronic Effects/Carcinogenicity**

Prolonged, excessive exposure to dust may cause pneumoconiosis, a lung disease caused by inhaling dust particles less than 0.5 micrometers into the lungs.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Graphite	7782-42-5	10000 mg/kg ( Rat )	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Graphite	7782-42-5	Non-irritating to the skin

Substances	CAS Number	Eye damage/irritation
Graphite	7782-42-5	Non-irritating to the eye

Substances	CAS Number	Skin Sensitization
Graphite	7782-42-5	Not classified

Substances	CAS Number	Respiratory Sensitization
Graphite	7782-42-5	No information available

Substances	CAS Number	Mutagenic Effects
Graphite	7782-42-5	Not regarded as mutagenic.

Substances	CAS Number	Carcinogenic Effects
Graphite	7782-42-5	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Graphite	7782-42-5	Not classified

Substances	CAS Number	STOT - single exposure
Graphite	7782-42-5	None under normal use conditions

Substances	CAS Number	STOT - repeated exposure
Graphite	7782-42-5	None under normal use conditions

Substances	CAS Number	Aspiration hazard
Graphite	7782-42-5	Not applicable

## 12. Ecological Information

**12.1 Toxicity****Ecotoxicity Effects**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
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Graphite	7782-42-5	No information available	No information available	No information available	No information available
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**12.2 Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Graphite	7782-42-5	No information available

**12.3 Bioaccumulative potential**

Does not bioaccumulate

Substances	CAS Number	Log Pow
Graphite	7782-42-5	No information available

**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

##### 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 0: Generally not water endangering.

### 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/](http://www.ChemADVISOR.com/)

#### Revision Date:

02-Mar-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**