

SAFETY DATA SHEET

STEELSEAL® 400

Revision Date: 18-Apr-2014

Revision Number: 12

1. Product and Company Identification

Product Name

Product Trade Name: STEELSEAL® 400

Other Names

Synonyms: None

Product Code: HM006540

Recommended Use

Recommended Use: Loss Circulation Material

Uses Advised Against: No information available

Company Name, Address and Contact Details

Manufacturer/Supplier: Halliburton New Zealand
1 Paraita Rd,
Bell Block, New Plymouth
New Zealand Registration No.: 824207

E-Mail address: fdunexchem@halliburton.com

Emergency Telephone Number: +64-6-7559274

New Zealand National Poisons Centre: 0800 764 766 (24 hours)

2. Hazard(s) Identification

Statement of Hazardous Nature

Not Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulation 2001; Not Classified as dangerous good according to NZS 5433:2012, UN, IMDG or IATA

Classification

Non-hazardous

Hazard and Precautionary Statements

Hazard Pictograms

Signal Word: None

Hazard Statements: Not Hazardous

Precautionary Statements

Prevention: None

Response: None

Storage: None

Disposal: None

Contains

| Substances | CAS Number | Substance HSNO Classification |
|-------------------------|------------|-------------------------------|
| Calcined petroleum coke | 64743-05-1 | Not applicable |

2.3 Other Hazards

None known

3. Composition and Information on Ingredients

| Substances | CAS Number | PERCENT (w/w) |
|-------------------------|------------|---------------|
| Calcined petroleum coke | 64743-05-1 | 60 - 100% |

4. First-Aid Measures

Requirements for First Aid or Medical Care

| | |
|-------------------|--|
| 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. |

Workplace Facilities Required

None

Relation to Health Effect**Most Important Symptoms/Effects**

May cause mild eye, skin, and respiratory irritation.

Medical Attention and Special Treatment**Notes to Physician**

Treat symptomatically

5. Fire-fighting measures

Type of Hazard**Flammability Hazard**

Flammable dust when in finely divided and highly suspended state.

5.1 Extinguishing media**Suitable Extinguishing Media**

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

HAZCHEM Code

Hazchem Code: None Allocated

Special Protective Equipment and Precautions for Fire Fighters**Special Protective Equipment for Fire-Fighters**

Not applicable.

Special Exposure Hazards

Not applicable.

6. Spillage, Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency proceduresUse 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

Handling Precautions

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.

Handling Practices

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Approved Handlers

This product does NOT require an approved handler.

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.

Store Site Requirements

No special controls required

Packaging

No special packaging required

8. Exposure Controls and Personal Protection

Workplace Exposure Standards

Exposure Limits

| Substances | CAS Number | New Zealand WES | ACGIH TLV-TWA |
|-------------------------|------------|-----------------|----------------|
| Calcined petroleum coke | 64743-05-1 | Not applicable | Not applicable |

Engineering Controls

Engineering Controls

A well ventilated area to control dust levels.

Personal Protective Equipment (PPE)

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.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

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 available

Property

Values

Remarks/ - Method

pH:

No data available

| | |
|--|--------------------------|
| Freezing Point/Range | No data available |
| Melting Point/Range | No data available |
| Boiling Point/Range | 4200 °C |
| Flash Point | > 356 °C; (for liquid) |
| Evaporation rate | No data available |
| Vapor Pressure | 1 mmHg |
| Vapor Density | 0.4 |
| Specific Gravity | 1.75 |
| 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

10.2 Chemical Stability

Stable

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.

Hazardous Reactions

Hazardous Polymerization: Will Not Occur

11. Toxicological Information

Health Effect from Likely Routes of Exposure**Acute Toxicity**

| | |
|---------------------|---|
| Inhalation | May cause mild respiratory irritation. |
| Eye Contact | May cause mild eye irritation. |
| Skin Contact | Prolonged or repeated contact may cause slight skin irritation. |
| Ingestion | 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.

Toxicity Data**Toxicology data for the components**

| Substances | CAS Number | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------------|------------|-------------------|-------------------|-------------------|
| Calcined petroleum coke | 64743-05-1 | No data available | No data available | No data available |

12. Ecological Information

12.1 Toxicity

Ecotoxicity Effects**Product Ecotoxicity Data**

No data available

Substance Ecotoxicity Data

| Substances | CAS Number | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Toxicity to Invertebrates |
|-------------------------|------------|--|--|----------------------------|--|
| Calcined petroleum coke | 64743-05-1 | ErL50(96h): > 1000 mg/L (Selenastrum capricornutum) NOELR(96h): > 1000 mg/L (Selenastrum capricornutum) | LL50(96h): > 1000 mg/L (Pimephales promelas) | No information available | EL50(48h): > 1000 mg/L (Daphnia magna) |

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

| Substances | Persistence and Degradability |
|-------------------------|--|
| Calcined petroleum coke | The methods for determining biodegradability are not applicable to inorganic substances. |

12.3 Bioaccumulative potential

Does not bioaccumulate

12.4 Mobility in soil

No information available

Ecotoxicity Hazard Statements

None known

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 |

NZ 5433.1999

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

IATA/ICAO

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

| | |
|---|---|
| New Zealand Inventory of Chemicals | All components listed on inventory or are exempt. |
| HSNO Approval Number | Non-hazardous |
| Group Name | Not Applicable |
| HSNO Controls | Refer to the NZ EPA website for more information: http://www.epa.govt.nz |
| Approved Handlers | Not Applicable |
| Poisons Schedule: | None Allocated |

16. Other information, including date of preparation or last revision**The following sections have been revised since the last issue of this SDS**

Not applicable

| | |
|-------------------------------|---|
| Additional information | For additional information on the use of this product, contact your local Halliburton representative. For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335. |
|-------------------------------|---|

Key literature references and sources for data

www.ChemADVISOR.com/
NZ CCID

Revision Date: 18-Apr-2014**Revision Note**

Not applicable

Disclaimer Statement

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End of Safety Data Sheet