

## SAFETY DATA SHEET

### N-SEAL™

Revision Date: 02-Mar-2023

Revision Number: 35

#### 1. Identification

**Product identifier**

**Product Name** N-SEAL™

**Other means of identification**

**Hazardous Material Number:** HM003708

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Lost Circulation Material

**Supplier details**

Halliburton Energy Services  
Av. Amazonas N37-29 y Villalengua Edif.,  
Quito, Ecuador

Halliburton Energy Services  
Carrera 7 No. 71-52, Floor 7, Torre B,  
Bogotá, Colombia

Halliburton Energy Services  
Avenida Principal De Santa Rita Sector  
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Santa Rita, WES, Venezuela

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Argentina: +54 11 5219 8871  
Chile: +56 44 8905208  
Colombia: +57 1 344 1317  
Panama: +50 78 387596  
Global Incident Response Access Code: 334305  
Contract Number: 14012

#### 2. Hazards Identification

**Classification of the hazardous chemical**

Not classified

**Label Elements**

Not classified

**Hazard Pictograms**

**Signal Word:** None

**Hazard Statements** Not Classified

**Precautionary Statements**

**Prevention** None

<b>Response</b>	None
<b>Storage</b>	None
<b>Disposal</b>	None

**Contains Substances**

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

**CAS Number**  
NA

**Other hazards which do not result in classification**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).  
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

**3. Composition/Information on Ingredients**

**Product Classification:** Substance

Substances	CAS Number	PERCENT (w/w)	GHS Classification
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not classified

The exact percentage (concentration) of the composition has been withheld as proprietary.

**4. First Aid Measures****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.

**Most important symptoms and effects, both acute and delayed**

No significant hazards expected.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically

**5. Fire-fighting measures****Suitable extinguishing media****Suitable Extinguishing Media**

All standard fire fighting media Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons**

None known.

**Physicochemical hazards arising from the chemical****Special exposure hazards in a fire**

Not applicable

**Special protective equipment and precautions for fire fighters****Special protective equipment for firefighters**

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

**6. Accidental Release Measures**

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

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid creating and breathing dust. Ensure adequate ventilation.  
See Section 8 for additional information.

**Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**Methods and material for containment and cleaning up**

Scoop up and remove.

**7. Handling and storage****Precautions for safe handling**

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

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

Store in a dry location.

**8. Exposure Controls/Personal Protection****Control parameters****Exposure Limits**

Substances	CAS Number	Venezuela	Colombia	Argentina
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable	Not applicable

**Appropriate engineering controls****Engineering Controls**

Use in a well ventilated area.

**Individual protection measures, such as personal protective equipment****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:

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**

Do not allow material to contaminate ground water system.

**9. Physical and Chemical Properties****Information on basic physical and chemical properties**

**Physical State:** fibers

**Odor:** Odorless

**Color** White to gray

**Odor Threshold:** No information available

**Property**

Remarks/ - Method

**Values****pH:**

No data available

**Freezing Point / Range**

No data available

**Melting Point / Range**

No data available

<b>Pour 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>	2.6
<b>Water Solubility</b>	Insoluble 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

**Other information**

<b>VOC Content (%)</b>	No data available
<b>Bulk Density</b>	12-26 lbs/ft3

**10. Stability and Reactivity****Reactivity**

Not expected to be reactive.

**Chemical stability**

Stable

**Possibility of hazardous reactions**

Will Not Occur

**Conditions to avoid**

None anticipated

**Incompatible materials**

Strong acids.

**Hazardous decomposition products**

Carbon monoxide and carbon dioxide.

**11. Toxicological Information****Information on possible routes of exposure**

**Principle Route of Exposure** Eye or skin contact, inhalation.

**Most Important Symptoms/Effects**

No significant hazards expected.

**Toxicology data for the components**

<b>Substances</b>	<b>CAS Number</b>	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

**Immediate, delayed and chronic health effects from exposure**

**Inhalation** None known.

**Eye Contact** May cause mechanical irritation to eye.  
**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.

**12. Ecological Information**

**Ecotoxicity**  
**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

**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

**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

**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

**Other adverse effects**

**Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

**13. Disposal Considerations**

**Disposal methods**

**Disposal methods**  
**Contaminated Packaging**

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

## 14. Transport Information

### Transportation Information

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

### 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

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

Not applicable

### Special precautions for user

None

## 15. Regulatory Information

### International Agreements

Montreal Protocol - Ozone Depleting Substances: Does not apply.  
 Stockholm Convention - Persistent Organic Pollutants: Does not apply  
 Rotterdam Convention - Prior Informed Consent: Does not apply.  
 Basel Convention - Hazardous Waste: Does not apply.

NFPA Ratings: Health 0, Flammability 0, Reactivity 0  
 HMIS Ratings: Health 0, Flammability 0, Physical Hazard 0 , PPE: B

## 16. Other Information

Revision Date: 02-Mar-2023

### Revision Note

Update to Format

### Key literature references and sources for data

www.ChemADVISOR.com/  
 NZ CCID

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

bw – body weight  
 CAS – Chemical Abstracts Service  
 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  
STEL – Short Term Exposure Limit  
h - hour  
d - day

**Disclaimer Statement**

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**End of Safety Data Sheet**