# HALLIBURTON

# SAFETY DATA SHEET N-SEAL™

# according to Regulation (EC) No. 2015/830

Revision Date: 30-Apr-2018 Preparation Date 30-Apr-2018 Revision Number: 25 Internal ID Code HM003708

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier	
Product Name	N-SEAL™
Internal ID Code	HM003708

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

Recommended Use	Viscosifier
Sector of uses	SU2 - Mining, (including offshore industries)
Product category(ies)	PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific
Process categories	PROC 26 - Handling of solid inorganic substances at ambient temperature

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

+44 1224 776888

www.halliburton.com <u>For further information, please contact</u> <u>E-mail Address:</u>fdunexchem@halliburton.com <u>1.4. Emergency telephone number</u> +44 8 08 189 0979 / 1-760-476-3961 Global Incident Response Access Code: 334305 Contract Number: 14012

Emergency telephone - Ar	ticle 45 - (EC)1272/2008
Turkey	Ulusal Zehir Danisma Merkezi (UZEM) :114 Acil Saglik Hizmetleri : 112
Europe	112
Bulgaria	Bulgarian poison centre: +359 2 915-44-09 or +359 2 915-43-46
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	00357 22 88 7171
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
Portugal	CIAV - Centro de Informação Antivenenos (Portuguese Poison Centre): + 351 213 303 271
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

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# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008 Not classified

2.2. Label Elements Not classified

### Hazard Pictograms

Signal Word:

None

Hazard Statements: Not Classified

Precautionary Statements: None

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

### 2.3. Other Hazards

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).

# **SECTION 3: Composition/information on ingredients**

NA

**CAS Number** 

3.1. Substances

Substance

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH Reg. No
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	NA	60 - 100%	Not classified	No data available

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

# **SECTION 4: 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	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			

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# **SECTION 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 in a fire

Not applicable

### 5.3. Advice for firefighters

### Special protective equipment for firefighters

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 creating and breathing dust. 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

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

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.

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

Store in a dry location.

# 7.3. Specific end use(s)

Exposure scenario Other Guidelines No information available No information available

### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

Substances	CAS Number	EU	UK	Netherlands	France
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable	Not applicable	Not applicable
Substances CAS Number Germany Spain Portugal Finland					

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Contains no hazardous substances in	NA		Not applicable	Not applicable	Not applicable	Not applicable
concentrations above						
cut-off values according to the competent authority						
are competent admonty						
Substances	CAS Numbe	r	Austria	Ireland	Switzerland	Norway
Contains no hazardous	NA		Not applicable	Not applicable	Not applicable	Not applicable
substances in						
concentrations above						
cut-off values according to						
the competent authority						
Substances	CAS Numbe	r	Italy	Poland	Hungary	Czech Republic
Contains no hazardous	NA		Not applicable	Not applicable	Not applicable	Not applicable
substances in						
concentrations above						
cut-off values according to						
the competent authority						
				· · · ·		
Substances Contains no hazardous	CAS Numb	er	Denmark	Romania	Croatia	Cyprus
substances in concentration	NA		Not applicable	Not applicable	Not applicable	Not applicable
above cut-off values	15					
according to the competent						
authority						
Derived No Effect Leve	I (DNEL)		No	o information availab	le	
General Population						
Predicted No Effect Con	ncentration	(PNEC)	No	o information availab	le.	
8.2. Exposure controls						
Engineering Controls	-	Use in a	well ventilated area	9		
Personal protective e	auipment				ot prevent excessive	exposures, the
	quipinoin			personal protective		
						ific application of this
		product.				
Respiratory Protect	ion			f significant exposure	es are possible then	the following
			or is recommended:			
			st respirator. (N95, F	P2/P3)		
Hand Protection			work gloves.			
Skin Protection			work coveralls.			
Eye Protection				gles to protect agains	st exposure.	
Other Precautions		None kn	own.			
Environmental Exposu	re Controls	Do not a	llow material to con	taminate ground wat	ter system	

# **SECTION 9: Physical and chemical properties**

 9.1. Information on basic physical and chemical properties

 Physical State:
 fibers
 Color:

 Odor:
 Odorless
 Odor Threshold

 Property
 Values

 Remarks/ - Method
 Values

Remarks/ - Method pH: Freezing Point / Range Color: White to gray Odor Threshold: No information available

No data available No data available

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**Melting Point / Range Boiling Point / Range** Flash Point Flammability (solid, gas) Upper flammability limit Lower flammability limit **Evaporation rate** Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition coefficient: n-octanol/water **Autoignition Temperature Decomposition Temperature** Viscosity **Explosive Properties Oxidizing Properties** 

9.2. Other information VOC Content (%) Bulk Density

No data available 2.6 Insoluble in water No data available No information available No information available

No data available 12-26 lbs/ft3

# 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

 None anticipated

 10.5. Incompatible materials

 Strong acids.

 10.6. Hazardous decomposition products

 Carbon monoxide and carbon dioxide.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

 Acute Toxicity
 Inhalation
 None known.

 Inhalation
 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.

### Toxicology data for the components

	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
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

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# **SECTION 12: Ecological information**

### 12.1. Toxicity

	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

### 12.2. 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

### 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

### 12.4. 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

### 12.5. Results of PBT and vPvB assessment

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).

Substances	PBT and vPvB assessment
Contains no hazardous substances in concentrations above	Not applicable
cut-off values according to the competent authority	

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

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# **SECTION 14: Transport information**

IMDG/IMO UN Number UN proper shipping name: Transport Hazard Class(es):	Not restricted Not restricted Not applicable
Packing Group: Environmental Hazards:	Not applicable Not applicable
ADN	
UN Number UN proper shipping name: Transport Hazard Class(es): Packing Group Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
<u>ADR/RID</u> UN Number UN proper shipping name: Transport Hazard Class(es): Packing Group Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
IATA/ICAO UN Number UN proper shipping name: Transport Hazard Class(es): Packing Group: Environmental Hazards:	Not restricted Not restricted Not applicable Not applicable Not applicable
<u>14.1.</u> 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 (European Inventory of	This product, and all its components, complies with EINECS
Existing Chemical Substances)	
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian Domestic Substances	All components listed on inventory or are exempt.
List (DSL)	
( )	

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

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### Germany, Water Endangering WGK 0: Generally not water endangering. Classes (WGK)

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable. Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

15.2. Chemical safety assessment

No information available

### **SECTION 16: Other information**

Full text of H-Statements referred to under sections 2 and 3 None

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

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/ NZ CCID

Revision Date: Revision Note SDS sections updated: 2

This safety data sheet complies with the requirements of Regulation (EC) No. 2015/830

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### End of Safety Data Sheet