**SDS no.** PID1146

Version 10

Revision date 18/May/2017 Supersedes date 15/Oct/2015



# Safety Data Sheet NUT PLUG\* (All Grades)

# 1. Identification

### 1.1 Product identifier

Product name NUT PLUG\* (All Grades)

Product code PID1146

Synonyms NUT PLUG\* FINE, NUT PLUG\* MEDIUM, NUT PLUG\* COARSE

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

**Recommended Use**Lost circulation material.

Uses advised against Consumer use

# 1.3 Details of the supplier of the safety data sheet

### **Supplier**

M-I L.L.C.

P.O.Box 42842 Houston, TX 77242 www.miswaco.slb.com Telephone: 1 281-561-1511

# M-I SWACO, A Schlumberger Company

200 - 125, 9th Avenue SE Calgary, Alberta T2G 0P6, Canada Telephone: 1-780-962-8221

E-mail address SDS@slb.com

#### Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals)

### 1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Asia Pacific +65 3158 1074, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, USA +1 281 561 1600, Canada +1 800 579 7421, Argentina: +54 11 5984 3690, Brazil: 0800-720-8000 0800-777-2323 (WGRA)

# 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### **GHS - Classification**

#### **Health hazards**

Carcinogenicity Category 1A



**Environmental hazards** 

Not classified

**Physical Hazards** 

Combustible dust

#### 2.2 Label elements



#### **Hazard statements**

H350 - May cause cancer

H232 - May form combustible dust concentrations in air

### **Precautionary statements**

P201 - Obtain special instructions before use

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician

P370 + P378 - In case of fire: Use dry sodium carbonate to extinguish

P403 + P235 - Store in a well-ventilated place. Keep cool

P202 - Do not handle until all safety precautions have been read and understood

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P272 - Contaminated work clothing should not be allowed out of the workplace

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents/ container to an approved waste disposal plant

# Hazards not otherwise classified

None known

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

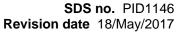
# 3. Composition/information on Ingredients

### 3.1 Substances

Chemical Name	CAS No	Weight-%
Cellulose	9004-34-6	60 - 100
Crystalline silica (impurity)	14808-60-7	<1

# 3.2 Mixtures

Not applicable





#### Comments

Percentages (concentrations) represented as a range are due to batch-to-batch variability.

# 4. First aid measures

#### 4.1 First aid measures

**Inhalation** If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

**Ingestion** Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth

to an unconscious person. Seek medical attention if irritation occurs.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention immediately if symptoms occur.

**Eye Contact** Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

# 4.2. Most important symptoms and effects, both acute and delayed Most important symptoms and effects, both acute and delayed

acute and aciayed

The severity of the symptoms described will vary dependant of the concentration and the

length of exposure. If adverse symptoms develop, the casualty should be transferred to

hospital as soon as possible.

**Symptoms** 

**General advice** 

**Inhalation** Please see Section 11. Toxicological Information for further information.

**Ingestion** Please see Section 11. Toxicological Information for further information.

**Skin contact** Please see Section 11. Toxicological Information for further information.

**Eye contact** Please see Section 11. Toxicological Information for further information.

# 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically

# 5. Fire-fighting measures

# 5.1 Extinguishing media

#### Suitable extinguishing media

Water Fog, Alcohol Foam, CO2, 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 hazards arising from the substance or mixture

# Unusual fire and explosion hazards

Suspended dust may present a dust explosion hazard.

# **Hazardous combustion products**

Carbon oxides (COx).



# 5.3 Advice for firefighters

### Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

# **Special Fire-Fighting Procedures**

Containers close to fire should be removed immediately or cooled with water.

# 6. Accidental release measures

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

Use personal protective equipment identified in Section 8. Evacuate and ventilate the area. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Prevent further leakage or spillage if safe to do so.

# 6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil. As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

#### **Environmental exposure controls**

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

#### **Methods for containment**

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading.

#### Methods for cleaning up

Shovel into suitable container for disposal. Take precautionary measures against static discharges. Avoid dust formation. Powdered material may form explosive dust-air mixtures.

# 6.4 Reference to other sections

See section 13 for more information.

# 7. Handling and storage

### 7.1 Precautions for safe handling

#### Handling

Use personal protective equipment as required. Avoid contact with skin, eyes and clothing. Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Avoid breathing dust; if exposed to high dust concentration, leave area immediately.

# 7.2 Conditions for safe storage, including any incompatibilities

Technical measures/precautions Keep airborne concentrations below exposure limits. Use spark-proof tools and

explosion-proof equipment. Ensure adequate ventilation.

Storage precautions Keep container/package tightly closed and in a well-ventilated place.

# 8. Exposure controls/personal protection

# 8.1 Control parameters

Exposure limits No biological limit allocated

Component	ACGIH TLV	OSHA PEL
Cellulose	10 mg/m <sup>3</sup>	15 mg/m³ TWA



9004-34-6 ( 60 - 100 )		5 mg/m³ TWA
Crystalline silica (impurity)	0.025 mg/m <sup>3</sup>	50 μg/m³ TWA
14808-60-7 ( <1 )		respirable fraction

Crystalline silica (impurity)

OSHA - Final PELs - Table Z-3 Mineral Dusts

(250)/(%SiO2 + 5) mppcf TWA, respirable fraction; (10)/(%SiO2 + 2) mg/m3 TWA, respirable fraction

#### 8.2 Exposure controls

A risk assessment is recommended to be performed by a qualified and trained personnel to analyze the worksite and recommends the appropriate controls such as engineering controls, work practice controls, and administrative controls as primary means of reducing employee exposure. When there is a remaining hazards after applying the primary controls, Personal Protective Equipment (PPE) must be used.

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

### **Engineering Controls**

Apply technical measures to comply with the occupational exposure limits. Keep airborne concentrations below exposure limits.

# Personal protective equipment

**Eye protection** Tightly fitting safety goggles.

Hand protection Use protective gloves made of: Neoprene Nitrile

Frequent change is advisable

Respiratory Protection All respiratory protection equipment should be used within a comprehensive respiratory

protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent. If exposed to airborne particles of this product use at least a NIOSH-approved N95 half-mask disposable or re-useable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved

P95 half-mask disposable or re-useable particulate respirator.

**Skin and body protection**Wear suitable protective clothing, Eye wash and emergency shower must be available at

the work place.

Hygiene measures Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing

before re-use.

# 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical stateSolidAppearanceTransparentColorTan - BrownOdorOdorlessOdor thresholdNot applicable

Property Values Remarks

pН

pH @ dilution

Melting / freezing pointNo information availableBoiling point/rangeNo information available

Flash point 193 °C / 380 °F PMCC

Not applicable

Evaporation rate (BuAc =1) No information available

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit No information available



@ 20 °C

Lower flammability limitNo information availableVapor pressureNo information availableVapor densityNo information available

**Specific gravity** 1.1 - 1.4 sg

**Bulk density** 577–641 kg/m<sup>3</sup> / 36–40 lb/ft3

Water solubility
Solubility in other solvents
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Insoluble in water
No information available
No information available
No information available
No information available

applicable

Dynamic viscosityNo information availablelog PowNo information available

**Explosive properties** Suspended dust may present a dust explosion hazard

Oxidizing properties None known.

9.2 Other information

Pour pointNo information availableMolecular weightNo information available

VOC content(%) None

**Density** No information available

#### Comments

The data listed above are typical physical and chemical properties that do not constitute product specification. Please refer to Technical Data Sheet for specifications.

# 10. Stability and reactivity

#### 10.1 Reactivity

Dust may form explosive mixture in air.

### 10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

# 10.3 Possibility of Hazardous Reactions

#### **Hazardous polymerization**

Hazardous polymerization does not occur.

#### 10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

### 10.5 Incompatible materials

Oxidizing agents.

# 10.6 Hazardous decomposition products

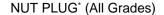
See Section 5.2.

# 11. Toxicological information

# 11.1 Information on toxicological effects

#### Acute toxicity Inhalation

Inhalation of dust in high concentration may cause irritation of respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Repeated or prolonged inhalation of crystalline silica dust can cause delayed lung injury, and other





diseases, including silicosis and lung cancer.

**Eye contact** Dust contact with the eyes can lead to mechanical irritation.

**Skin contact** Contact with dust can cause mechanical irritation or drying of the skin.

**Ingestion** Irritant; may cause pain or discomfort to mouth, throat and stomach.

Toxicology data for the components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cellulose	> 5 g/kg ( Rat )	> 2 g/kg ( Rabbit )	> 5800 mg/m <sup>3</sup> ( Rat ) 4 h
Crystalline silica (impurity)	= 500 mg/kg ( Rat )	No data available	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Cellulose	No data available	No data available	No data available	Known Human Carcinogen
Crystalline silica (impurity)	Group 1; Monograph 100C [2012] Monograph 100C [2012] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] Group 1; Monograph 68	Carcinogen	Present	Known Human Carcinogen

Sensitization Not classified.

Mutagenic effects This substance has no evidence of mutagenic properties.

Carcinogenicity Contains a known or suspected carcinogen. Crystalline silica dust is listed by IARC in

Group 1 as known to cause lung cancer in humans, if inhaled.

**Reproductive toxicity**No evidence of toxicity to reproduction.

**Developmental toxicity**Not known to cause birth defects or have a deleterious effect on a developing fetus.

Routes of exposure Inhalation. Skin contact. Eye contact.

Routes of entry Inhalation.

Specific target organ toxicity -

Not classified

Single exposure

Specific target organ toxicity - Repeated exposure

Not classified.

Target organ effects Respiratory system.

**Aspiration hazard** Not applicable.

# 12. Ecological information

### 12.1 Toxicity

#### Toxicity to algae

This product is not considered toxic to algae.



### Toxicity to fish

This product is not considered toxic to fish.

### Toxicity to daphnia and other aquatic invertebrates

This product is not considered toxic to invertebrates.

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other
			aquatic invertebrates
Cellulose	No information available	No information available	No information available
Crystalline silica (impurity)	No information available	No information available	No information available

# 12.2 Persistence and degradability

Not Applicable - Inorganic chemical.

#### 12.3 Bioaccumulative potential

Not Applicable - Inorganic chemical.

#### 12.4 Mobility in soil

Insoluble in water.

# 12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

# 12.6 Other adverse effects.

None known.

# 13. Disposal considerations

# 13.1 Waste treatment methods

**Disposal Method**Disposal should be made in accordance with federal, state and local regulations.

Contaminated packaging Empty containers should be taken for local recycling, recovery or waste disposal.

# 14. Transport information

### 14.1. UN number

Not regulated

UN No. (DOT)
UN No. (TDG)
UN/ID No. (ADR/RID/ADN/ADG)
UN No. (IMDG)
UN No. (ICAO)

Not regulated
Not regulated
Not regulated
Not regulated

# 14.2. UN proper shipping name

The product is not covered by international regulation on the transport of dangerous goods

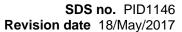
### 14.3 Hazard class(es)

DOT Hazard class

TDG Hazard class

Not regulated

Not regulated





ADR/RID/ADN/ADG Hazard class
IMDG Hazard class
ICAO Hazard class/division

Not regulated
Not regulated
Not regulated

14.4 Packing group

TDG Packing group
ADR/RID/ADN/ADG Packing group
IMDG Packing group
ICAO Packing group
Not regulated
Not regulated
Not regulated
Not regulated
Not regulated
Not regulated

# 14.5 Environmental hazard

No

### 14.6 Special precautions

Not applicable

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

Please contact MISDS@slb.com for info regarding transport in Bulk.

# 15. Regulatory information

#### International inventories

USA (TSCA)	Complies
Canada (DSL)	Complies
European Union (EINECS and ELINCS)	Complies
Philippines (PICCS)	Complies
Japan (ENCS)	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korean (KECL)	Complies
New Zealand (NZIoC)	Complies

# U.S. Federal and State Regulations

# SARA 311/312 Hazard Categories

Delayed (chronic) health hazard. Fire Hazard (Combustible Dust)

# SARA 302/304, 313, CERCLA RQ, California Proposition 65

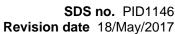
Note: If no components are listed below, this product is not subject to the referenced SARA and CERCLA regulations and is not known to contain a Proposition 65 listed chemical at a level that is expected to pose a significant risk under anticipated use conditions.

Chemical Name	SARA 302 / TPQs	SARA 313	CERCLA RQ
Cellulose	N/A	N/A	N/A
Crystalline silica (impurity)	N/A	N/A	N/A

# **State Comments**

Proposition 65: This product contains chemical(s) considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 to cause cancer and/or reproductive toxicity. See table under U.S. Federal and State Regulations for the specific chemicals.

# Canadian Classification





This Safety Data Sheet has been prepared in compliance with the Hazardous Products Regulations.

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# 16. Other information

Supersedes date 15/Oct/2015

Revision date 18/May/2017

Version 10

This SDS has been revised in the

following section(s)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING 2. Hazards Identification 3. Composition/information on Ingredients 6. Accidental release measures 7. Handling and storage 8. EXPOSURE CONTROLS / PERSONAL PROTECTION 11. Toxicological information 16. Updated

according to WHMIS 2015.

### **HMIS** classification

Health 1\*
Flammability 1
Physical hazard 0
PPE E

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