



## Safety Data Sheet Cement Class A D901

### 1. Identification

#### 1.1 Product identifier

**Product name** Cement Class A D901  
**Product code** D901

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

**Recommended Use** Used as a cementing additive in oilfield applications.  
**Uses advised against** Consumer use

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

##### Supplier

**Schlumberger Technology Corporation**  
110 Schlumberger Drive  
Sugar Land, Texas 77478, USA  
Telephone: 1-281-285-7873

##### Schlumberger Canada, Ltd.

200, 125 - 9th Avenue SE  
Calgary, Alberta T2G 0P6, Canada

##### Schlumberger Serviços de Petróleo LTDA

Rua Internacional 500Cavaleiro – Macaé, RJ. CEP: 27.930-075  
Telephone: +55 22 3311-8974

**E-mail address** SDS@slb.com

##### Prepared by

Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Sandra McWilliam

#### 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 +1 281 595 3518, Canada +1 800 579 7421 , Argentina: +54 11 5984 3690, Brazil : +55 11 3197 5891

### 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

##### GHS - Classification

##### Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B

Specific target organ toxicity - Single exposure	Category 3 - (H335)
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**Environmental hazards** Not classified

**Physical Hazards** Not classified

## 2.2 Label elements



### Signal word

DANGER

### Hazard Statements

H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H318 - Causes serious eye damage  
 H335 - May cause respiratory irritation

### Precautionary Statements

P271 - Use only outdoors or in a well-ventilated area  
 P280 - Wear protective gloves, protective clothing, eye protection  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER or physician

### Supplementary precautionary statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P272 - Contaminated work clothing should not be allowed out of the workplace  
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention  
 P362 + P364 - Take off contaminated clothing and wash it before reuse  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### Hazards not otherwise classified

None known

**Unknown acute toxicity** Not applicable.

## 3. Composition/information on Ingredients

### 3.1 Substances

Chemical Name	CAS No	Weight-%
Portland cement	65997-15-1	60-100

### 3.2 Mixtures

Not applicable

**Comments**

No Comments.

## 4. First Aid Measures

### 4.1 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>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation persists.
<b>Eye Contact</b>	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses, if worn. 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

**General advice** 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**

<b>Inhalation</b>	Please see Section 11. Toxicological Information for further information.
<b>Ingestion</b>	Please see Section 11. Toxicological Information for further information.
<b>Skin contact</b>	Please see Section 11. Toxicological Information for further information.
<b>Eye contact</b>	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**

Use extinguishing media appropriate for surrounding material.

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

None known.

## 5.2. Special hazards arising from the substance or mixture

### **Unusual fire and explosion hazards**

None known.

### **Hazardous combustion products**

React with hydrofluoric acid (HF) forming toxic gas (SiF<sub>4</sub>).

## 5.3 Advice for firefighters

### **Special protective equipment and precautions 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

Avoid contact with the skin and the eyes. Avoid dust formation. Use personal protective equipment. See also section 8.

#### **Advice for non-emergency responders**

Evacuate non-essential personnel.

#### **Advice for emergency responders**

Evacuate personnel to safe areas. Use non-slip safety shoes in areas where spills or leaks can occur. Wear respiratory protection. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

#### **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 and keep powder dry.

#### **Methods for cleaning up**

Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Pick up and transfer to properly labeled containers. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

### 6.4 Reference to other sections

See section 13 for more information.

## **7. Handling and Storage**

### 7.1 Precautions for safe handling

#### **Handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Avoid dust formation. Persons susceptible to allergic reactions should not handle this product. May produce an allergic reaction.

**Hygiene measures**

Use good work and personal hygiene practices to avoid exposure. When using do not smoke, eat or drink. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing.

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

<b>Technical measures/precautions</b>	Ensure adequate ventilation. Keep airborne concentrations below exposure limits. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage precautions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Avoid heat, flames and other sources of ignition. Protect from moisture. Avoid contact with: Oxidizing agents. Strong acids. Aluminum. Hydrofluoric acid (HF).
<b>Packaging materials</b>	Use specially constructed containers only.

## 8. Exposure Controls/Personal Protection

**8.1 Control parameters****Exposure limits**

**NUI = Nuisance dust, TWA 4mg/m<sup>3</sup> Respirable Dust, 10mg/m<sup>3</sup> Total Dust.**

Chemical Name	ACGIH TLV	OSHA PEL	Argentina - Occupational Exposure Limits - TWAs (CMPs)	Brazil - Occupational Exposure Limits - TWAs (LTs)	Mexico - Occupational Exposure Limits - TWAs (LMPE-PPTs)
Portland cement	1 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> TWA 50 mppcf	10 mg/m <sup>3</sup> TWA	Not determined	1 mg/m <sup>3</sup> TWA VLE-PPT (respirable fraction)

Portland cement

OSHA - Final PELs - Table Z-3 Mineral Dusts  
50 mppcf TWA (<1% Crystalline silica)

**IDLH (Immediately Dangerous to Life or Health)**

This product contains substance(s) classified as Immediately Dangerous to Life or Health (IDLH) by the US National Institute for Occupational Safety and Health (NIOSH). The purpose of establishing an IDLH value is to ensure that the worker can escape from a given contaminated environment in the event of failure of the most protective respiratory protection equipment. In the event of failure of respiratory protection equipment every effort should be made to exit immediately.

Chemical Name	IDLH (Immediately Dangerous to Life or Health)
Portland cement 65997-15-1	5000 mg/m <sup>3</sup> IDLH

**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**

Ensure adequate ventilation. Provide appropriate exhaust ventilation at places where dust is formed.

**Personal protective equipment**

<b>Eye protection</b>	Safety glasses with side-shields. Tightly fitting safety goggles.
<b>Hand protection</b>	Impervious gloves made of: PVC disposable gloves Rubber gloves Frequent change is advisable
<b>Respiratory Protection</b>	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.
<b>Skin and body protection</b>	Wear appropriate personal protective clothing to prevent skin contact, Eye wash and emergency shower must be available at the work place.
<b>Hygiene Measures</b>	Wash hands before breaks and immediately after handling the product, Remove and wash contaminated clothing before re-use.
<b>Thermal hazards</b>	Not applicable.

## 9. Physical and Chemical Properties

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Solid
<b>Appearance</b>	Powder
<b>Color</b>	Gray or White
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>	Not applicable	
<b>pH @ dilution</b>	11 - 13	@10% sol
<b>Melting point</b>	> 1250 °C / 2282 °F	
<b>Boiling point/range</b>	No information available	
<b>Flash point</b>	Does not flash	
<b>Evaporation rate (BuAc =1)</b>	Not applicable	
<b>Flammability</b>	Not applicable	
<b>Explosion limits:</b>		
<b>Upper explosion limit</b>	No information available	
<b>Lower explosion limit</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Relative Vapor Density</b>	No information available	
<b>Specific gravity</b>	No information available	
<b>Bulk density</b>	0.9 - 1.5 g/cm <sup>3</sup>	
<b>Water solubility</b>	Slightly soluble in water.	
<b>Solubility in other solvents</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>	No information available	
<b>Explosive properties</b>	Not applicable	
<b>Oxidizing properties</b>	Not applicable	

**9.2 Other information**

<b>Pour point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content(%)</b>	No information available
<b>Density and/or Relative Density</b>	2.75 - 3.20

**Comments**

The data listed above are typical physical and chemical properties and should not be construed as product specification.

**10. Stability and Reactivity****10.1 Reactivity**

React with hydrofluoric acid (HF) forming toxic gas (SiF<sub>4</sub>).

**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**

Protect from moisture. Avoid dust formation. Avoid heat, flames and other sources of ignition.

**10.5 Incompatible materials**

Oxidizing agents. Hydrofluoric acid (HF). Strong acids. Aluminium.

**10.6 Hazardous decomposition products**

See Section 5.2.

**11. Toxicological Information****11.1 Information on toxicological effects****Acute toxicity**

<b>Inhalation</b>	Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Contact with moist mucous membranes of the respiratory system can cause caustic condition resulting in burns.
<b>Eye contact</b>	Causes serious eye damage.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

**Toxicology data for the components**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Portland cement	No data available	No data available	No data available

Chemical Name	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Portland cement	No data available	A4 Not Classifiable as a Human Carcinogen	No data available	No data available

#### Delayed and immediate effects and chronic effects from short and long term exposure

<b>Sensitization</b>	May cause allergic skin reaction.
<b>Mutagenic effects</b>	This product does not contain any known or suspected mutagens.
<b>Carcinogenicity</b>	This product does not contain any known or suspected carcinogens.
<b>Reproductive toxicity</b>	This product does not contain any known or suspected reproductive hazards.
<b>Developmental toxicity</b>	Not known to cause birth defects or have a deleterious effect on a developing fetus.
<b>Routes of Exposure</b>	Skin contact. Inhalation. Eye contact.
<b>Routes of entry</b>	Inhalation. Skin contact. Eye contact.
<b>Specific target organ toxicity - Single exposure</b>	Category 3
<b>Specific target organ toxicity - Repeated exposure</b>	Not classified.
<b>Target organ effects</b>	Respiratory system. Lungs.
<b>Aspiration hazard</b>	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.

#### Toxicology data for the components

Chemical Name	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Portland cement	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

Slightly soluble 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

<b>Disposal Method</b>	Disposal should be made in accordance with federal, state and local regulations.
<b>Contaminated packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.

## 14. Transport information

### 14.1. UN number

<b>UN No. (DOT)</b>	Not regulated
<b>UN No. (MT/ANTT)</b>	Not regulated
<b>UN No. (TDG)</b>	Not regulated
<b>UN/ID No. (ADR/RID/ADN/ADG)</b>	Not regulated
<b>UN No. (IMDG/ANTAQ)</b>	Not regulated
<b>UN No. (ICAO/ANAC)</b>	Not regulated
<b>UN No. (DPC)</b>	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)

<b>DOT Hazard class</b>	Not regulated
<b>ANTT Hazard class</b>	Not regulated
<b>TDG Hazard class</b>	Not regulated
<b>ADR/RID/ADN/ADG Hazard class</b>	Not regulated
<b>IMDG/ANTAQ Hazard class</b>	Not regulated
<b>ICAO/ANAC Hazard class/division</b>	Not regulated
<b>DPC Hazard class</b>	Not regulated

### 14.4 Packing group

<b>DOT Packing group</b>	Not regulated
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<b>ANTT Packing group</b>	Not regulated
<b>TDG Packing group</b>	Not regulated
<b>ADR/RID/ADN/ADG Packing group</b>	Not regulated
<b>IMDG/ANTAQ Packing group</b>	Not regulated
<b>ICAO/ANAC Packing group</b>	Not regulated
<b>DPC Packing group</b>	Not regulated

**14.5 Environmental hazard**

No

**14.6 Special precautions**

None

**15. Regulatory Information**

**International inventories**

<b>USA (TSCA)</b>	Complies
<b>Canada (DSL)</b>	Complies
<b>Philippines (PICCS)</b>	Complies
<b>Japan (ENCS)</b>	Complies
<b>China (IECSC)</b>	Complies
<b>Australia (AICS)</b>	Complies
<b>Korean (KECL)</b>	Complies
<b>New Zealand (NZIoC)</b>	Complies

**Europe - REACH**

All products supplied from the European Economic Area (EEA) are compliant with the REACH Regulation EC 1907/2006. For products supplied from the EEA, Schlumberger and/or its suppliers have pre-registered and is registering all of the substances that it and/or its suppliers manufactures in or imports into the EEA that are subject to Title II of the REACH Regulation. All products supplied from outside the EEA are subject to REACH only if imported into the EEA. The importer of the products must comply with REACH for each imported substance. Contact REACH@slb.com for REACH information.

**IMPORTS, Canada**

No import volume restrictions.

**U.S. Federal and State Regulations**

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

<b>Chemical Name</b>	<b>SARA 302 / TPQs</b>	<b>SARA 313</b>	<b>CERCLA RQ</b>
Portland cement	N/A	N/A	N/A

**California Proposition 65**

This product does not contain chemical[s] which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**Canadian Classification**

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

<b>Brazil Regulation</b>	This SDS was prepared in accordance with Brazil law ABNT NBR 14725:2014
<b>Federal Police</b>	Not determined
<b>Army</b>	Not determined
<b>ANVISA</b>	Not determined
<b>MTE (NR 15)</b>	No information available

**16. Other Information**

**Supersedes date** 06/May/2016

**Revision date** 08/Jun/2021

**Version** 7

**This SDS has been revised in the following section(s)** All sections. No changes with regard to classification have been made.

**HMIS classification**

Health	3*
Flammability	1
Physical hazard	0
PPE	E

N/A - Not Applicable, N/D - Not Determined.

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