SAFETY DATA SHEET

Revision: 07/03/2024

1. Identification

Trade Name:	Pel Plug TR60
Description:	Time release coated bentonite pellets
Synonyms:	Bentonite – Montmorillonite - Smectite
Intended use:	Well / Borehole Sealant
Recommended Restrictions:	Workers (and your customers or users in the cases of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer:

PDSCo, Inc.
105 W. Sharp St
El Dorado, AR 71730
USA
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2. Hazards Identification

Physical Hazards:	Not classified
Health Hazards:	Carcinogenicity, Category 1A
	Specific target organ toxicity, repeated exposure Category 1
Environmental Hazards:	Not classified

Label Elements

Hazard Symbol:

Signal Word:	Danger
Hazard Statement:	May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement

Prevention:	Keep out of reach of children. Read label before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response:	If medical advice is needed, have product container or label at hand. If swallowed: Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention.
Storage:	Store away from incompatible materials.
Disposal:	Dispose of waste in accordance with local authority requirements.
Other Hazards:	Material can be slippery when wet.

3. Composition / Information on Ingredients

Substances:	Name & Synonyms	CAS number	%
	Trade Secret*	Proprietary*	
	Bentonite Montmorillonite Smectite	1302-78-9	90-100
Constituents:			
	Silica, Crystalline, Quartz	14808-60-7	<= 5
	Silica, Crystaline, Cristobalite	14464-46-1	<= 2
	Other components below reportable levels		

- Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition: Occupational Exposure Limits for constituents are listed in section 8. Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. Bentonite contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 6%. Not applicable to consumer products.

4. First-Aid Measures

Inhalation:	Remove the source of contamination or remove the affected to fresh air. Seek medical attention if respiratory symptoms persist. No specific first aid measures noted.
Ingestion:	Rinse mouth thoroughly. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center.
Skin:	No hazards which require first aid measures. Wash the skin with soap and water. If any irritation persists seek medical attention.
Eyes:	No hazards which require first aid measures. If irritation occurs flush thoroughly with water. If irritation persists seek medical attention.

General Information: If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Firefighting Measures

Suitable extinguishing media:	All standard firefighting media.
Extinguishing media which must not be used for safety reasons:	None known.
Special exposure hazards:	Non-combustible. The product itself will not burn. The product becomes slippery when wet.
Special protective equipment for firefighters:	Standard protective clothing and firefighting equipment.

6 Accidental Release Measures

Personal precautions:	No specific precautions are necessary. Avoid creating and breathing dust – see section 8. The product becomes slippery when wet.

Environmental precautions:	No special environmental precautions required.
Methods for cleaning up:	Avoid creating and breathing dust.

7. Handling and Storage

Handling:	Do not breathe airborne dust and avoid creating dusty conditions. Material is slippery when wet.
Storage:	Store in dry storage area. Close container when not in use. No restrictions on storage with other products.

8. Exposure Controls / Personal Protection

Occupational Exposure Limits

US ACGIH Threshold Limit Values

Constituents	Type	Value	Form
Silica, Crystalline, Silica (CAS 14808-60-7)	TWA	0.025 mg/m^3	Respirable Fraction
Silica, Crystalline, Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m^3	Respirable Fraction

Constituents	Type	Values	Form
Trade Secret	TWA	3 mg/m^3	Respirable Particles

Biological Limit Values:	No biological exposure limits noted for the ingredients.
Exposure Guidelines:	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
Appropriate Engineering Controls:	Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits. If engineering measures are not sufficient to maintain concentration levels of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.
Personal Protective Equipment:	If engineering controls and work practices cannot prevent excessive exposure, the selection of personal protective equipment should be determined by a qualified professional based on specific application of this product.
Respiratory Protection:	Ensure good ventilation. Use a NIOSH/MSHA approved respirator If there is risk of exposure to dust at levels exceeding the exposure limits.
Hand Protection:	Not required under normal conditions.

Eye Protection:	Goggles or safety glasses when there is danger of eye contact.
Skin Protection:	Standard work clothing. Environmental Exposure Controls: No special requirements.
General Hygiene:	Always observe good hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Use good industrial hygiene practices in handling this material.

9. Physical and Chemical Properties

Appearance:	Pellets
Odor:	None/slight
PH (0.5% solution):	7 - 11
Melting point	Not determined.
Boiling point:	Not applicable
Flash point:	Not applicable
Explosive properties:	Not explosive
Oxidizing properties:	Not determined
Vapor pressure:	Not determined
Vapor density:	Not applicable
Relative density:	2.6 g/cm^3
Solubility	
- water solubility:	< 0.9 mg/l
Partition coefficient:	
n-octanol/water:	Not applicable
Viscosity:	Not applicable
Evaporation rate:	Not applicable
VOC:	0%

10. Stability and Reactivity

Stability:	Stable under normal conditions of use.
Conditions to avoid:	Moisture
Materials to avoid:	None known
Hazardous decomposition products:	None

11. Toxicological Information

Acute toxicity:	Not classified
Eye Contact:	Dust in the eyes may cause irritation.
Ingestion:	Not classified
Inhalation:	Inhalation of dust may irritate respiratory system.
Skin contact:	Dust may irritate skin.

Toxicology Data

Substance	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Bentonite	1302-78-9	> 5000 mg (rat)	No data	> 5.27 mg/L (rat)
		> 2000 mg (rat)	No data	No data

Skin Corrosion:	Not classified.
Serous Eye Irritation:	Not classified. Dust, mild irritant to eyes.
Respiratory Sensitization:	Not classified
Skin sensitization:	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk…" (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. This product contains <10% total crystalline silica. The respirable crystalline silica as determined by the SWeRF method is <1% w/w.
Reproductive Toxicity:	Not classified.
Aspiration Hazard:	Not an aspiration hazard.
Chronic Effects:	Not expected to be hazardous by WHMIS criteria. Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological Information

Ecotoxicity: The product is not classified as environmentally hazardous, however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Substance	CAS Number	Species	Toxicity Results
Bentonite	1302-78-9	Oncorhynchus Mykiss	TLM96 10000 ppm
		Oncorhynchus Mykiss	LC50 (96h) 16000-19000 mg/L
		Black Bass	LC50 (24h) 2800-3200 mg/L
		Warmouth Bass	LC50 (24h) 2800-3200 mg/L
		Blue Gill	LC50 (24h) 2800-3200 mg/L
		Sunfish	LC50 (24h) 2800-3200 mg/L
		Metacarcinus Magister	EC50 (96h) 81.6 mg/L
		Pandalus Danae	EC50 (96h) 24.8 mg/L
		Daphnia Magna	EC50 (48h) > 100 mg/L

Persistence and Degradability:	Not applicable to inorganic substances
Bioaccumulative Potential:	Will not bioaccumulate.
Mobility in Soil:	Near insoluble, low mobility in soil.
Other Adverse Effects:	No adverse ecological effects are expected.

13. Disposal Considerations

Disposal Instructions: Dispose according to all local, state and federal regulations.
Hazardous waste code: Not regulated
Contaminated packaging: Follow all applicable regulations.

14. Transport Information

Land transport (DOT/ADR) Not classified as dangerous for transport.
Sea transport (IMDG/IMO): Not classified as dangerous for transport.
Air transport (IATA/ICAO): Not classified as dangerous for transport.

Transport in bulk according to Annex II
of MARPOL 73/78 and the IBC Code: Not applicable

15. Regulatory Information

US Federal Regulations: This product is not known to be a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

CERCLA Hazardous
Substances List (40 CFR 302.4) Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard Categories:

Immediate Hazard:	No
Delayed Hazard:	No
Fire Hazard:	No
Pressure Hazard:	No
Reactivity Hazard:	No

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Reactivity Hazard:	No

SARA 302 Extremely Hazardous Substances
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
None present

SARA 311/312 Hazardous Chemical: No

SARA 313 – Specific Toxic Chemical Listings
This material does not contain any chemical components with known CAS numbers that exceed the

threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
None present. Not Regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed

17. Other Information

HMIS Rating
Health: 1
Flammability: 0
Reactivity: 0

NFPA Rating
Health: 1
Fire: 0
Reactivity: 0

Training Advice: Read the safety data sheet and technical data sheet prior to using the product.

Further Information: UVCB = a substance of Unknown or Variable composition, Complex reaction products or Biological materials

SWeRF = Size Weighted Respirable Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product.

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