



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name PUREGOLD® CLEAN DRILL
Version # 02
Revision date 27-September-2010
Chemical description Proprietary Carbohydrate Blend
Manufacturer information CETCO
Drilling Products Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safetydata@amcol.com
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General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Emergency overview Material can be slippery when wet. Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air.

OSHA regulatory status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential health effects

Routes of exposure Eye contact Inhalation.

Eyes Dust or powder may irritate eye tissue. Symptoms include itching, burning, redness and tearing.

Skin Substance may cause slight skin irritation. No components in this product are known to be absorbed through the skin.

Inhalation Inhalation of dusts may produce respiratory irritation and may cause allergic respiratory sensitization reactions.

Ingestion Ingestion of this product may cause blockage of the mouth, pharynx, trachea, esophagus, and the gastrointestinal system, which may cause choking, suffocation, or other life threatening medical conditions.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments Occupational Exposure Limits for constituents are listed in Section 8.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists.

Skin contact Wash affected area with mild soap and water. Get medical attention if irritation develops or persists.

Inhalation If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Ingestion Get medical attention immediately.

Notes to physician Provide general supportive measures and treat symptomatically.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties Dust concentrations greater than 0.04 oz/ft³ may ignite at 590° C or when exposed to ignition source.

Extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Protection of firefighters

Protective equipment and precautions for firefighters

Material can be slippery when wet. Move containers from fire area if you can do it without risk.

Fire fighting equipment/instructions

Material can be slippery when wet. Move containers from fire area if you can do it without risk.

6. Accidental Release Measures

Personal precautions

Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Methods for containment

Stop leak if you can do so without risk.

Methods for cleaning up

Sweep up or gather material and place in appropriate container for disposal. Avoid the generation of dusts during clean-up.

7. Handling and Storage

Handling

Material can be slippery when wet. Keep formation of airborne dusts to a minimum. Take measures to prevent the build up of electrostatic charge. Provide appropriate exhaust ventilation at places where dust is formed. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Guard against dust accumulation of this material. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Constituents

Type

Value

Form

INERT OR NUISANCE DUST (SEQ250)

TWA

3.0000 mg/m3
10.0000 mg/m3

Respirable particles.
Inhalable particles.

U.S. - OSHA

Constituents

Type

Value

Form

INERT OR NUISANCE DUST (SEQ250)

PEL

5.0000 mg/m3
15.0000 mg/m3
5.0000 mg/m3
15.0000 mg/m3
50.0000 mppcf
15.0000 mppcf

Respirable fraction.
Total dust.
Respirable fraction.
Total dust.
Total dust.
Respirable fraction.

Engineering controls

Ensure adequate ventilation, especially in confined areas. 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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

Eye / face protection

Wear dust goggles.

Skin protection

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

General hygiene considerations

Use good industrial hygiene practices in handling this material. Wash hands before breaks and immediately after handling the product.

9. Physical & Chemical Properties

Appearance

Powder.

Color

Off-white.

Odor

Flour-like

Odor threshold

Not available.

Physical state

Solid

Form

Not available.

pH	5 - 8
Melting point/Freezing point	Decomposes
Boiling point	Not available.
Flash point	> 199.4 °F (> 93 °C)
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Relative density	Not available.
Solubility (water)	Complete
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	0 % estimated
Percent volatile	0 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks. Dust cloud ignition temperature 590°C.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Product	Test Results
PUREGOLD® CLEAN DRILL	Acute Oral LD50 Hamster: 6000 mg/kg estimated Acute Oral LD50 Mouse: 8100 mg/kg estimated Acute Oral LD50 Rabbit: 7000 mg/kg estimated
Sensitization	May cause sensitization of susceptible persons by inhalation of aerosol or dust.
Local effects	Product dust may be irritating to eyes, skin and respiratory system.
Chronic effects	Prolonged skin contact may cause skin irritation and/or dermatitis. Overexposure to dusts may result in pneumoconiosis, a lung disease due to permanent deposition of substantial amounts of particulate matter in the lungs.
Carcinogenicity	Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.
Mutagenicity	No data available for this product.
Teratogenicity	No data available for this product.

12. Ecological Information

Ecotoxicological data

Product	Test Results
PUREGOLD® CLEAN DRILL	LC50 Fish: 218 mg/l 96.00 hours estimated
Ecotoxicity	This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. No data is available on the product itself.
Environmental effects	No data available for this product.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations. Do not allow this material to drain into sewers/water supplies.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Food and Drug Administration (FDA) GRAS additive

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

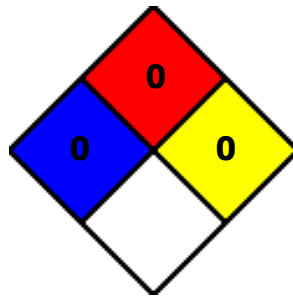
State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings



NFPA ratings**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

27-September-2010

This data sheet contains changes from the previous version in section(s):

Regulatory Information: United States