

Material Safety Data Sheet

SECTION I

PRODUCT NAME OR NUMBER (AS IT APPEARS ON LABEL):

AR4012, AR4013, AR4014, AR4015, AR4016, AR4017, AR4018, AR4019,  
AR4020, AR4021, AR4022, AR4023, AR4024, AR4025, AR4026, AR4027, AR4028

SOIL STANDARD

MANUFACTURER: Alpha Resources, Inc.                      TELEPHONE: 269-465-5559  
P.O. Box 199  
Stevensville, MI 49127

MANUFACTURER'S DUNNS NO. 08 383 8045

HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD  
CLASSES, HAZARD ID NO:

Ball Clay

CHEMICAL FAMILY: Kaolinite

FORMULA:  $\text{Al}_2\text{O}_3\text{-}2\text{SiO}_2\text{-}2\text{H}_2\text{O}$

SECTION II - INGREDIENTS (LIST ALL INGREDIENTS)

CAS NO.	% W	CHEMICAL NAMES	ACGIH LTV	OSHA PEL
14808-60-7	5-30	Crystalline Silica (Quartz)	.05 mg/m3	.1 mg/m3
13463-67-7	3	Titanium Dioxide	10 mg/m3	15 mg/m3
1332-58-7	67-92	Ball Clay	N/A	N/A

SECTION III - PHYSICAL DATA

Boiling point: 1020 C                      SPECIFIC GRAVITY = 2.4 - 2.6  
(WATER = 1)

% Volatile by volume: nil

Vapor pressure: N/A

Percent solid(s) by weight % = 100

Vapor density (air = 1): N/A

Evaporation rate: N/A

Solubility in water: N/A                      pH: 4.0-8.0

Melting point: N/A

Material is SOLID

Appearance and odor: VARIOUS SHADES OF GRAY, EARTH ODOR

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash point: N/A

Flammable limits: LEL: N/A

UEL: N/A

Extinguishing media: WATER FOG, DRY CHEMICAL, FOAM

Special fire fighting procedures: NONE

Unusual fire and explosion hazards: NONE

#### SECTION V HEALTH HAZARD DATA

##### CARCINOGEN INFORMATION: SILICA

WARNING! This product contains crystalline silica. IARC Monograph Volume 68, 1997 concludes "There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz for cristobalite from occupational sources." IARC classification - Group 1.

The National Toxicology Program (NTP), in the 6<sup>th</sup> Annual Report of Carcinogens, 1991, has included crystalline silica on its list of substances that are "reasonable anticipated to be carcinogens."

NIOSH has identified crystalline silica as a Potential Occupational Carcinogen USING THE OSHA Classification system outlined in 29 CFR 1990.103.

WARNING! This product contains Titanium Dioxide. NIOSH has identified Titanium Dioxide as a potential occupational carcinogen.

##### ROUTES OF ENTRY:

Eyes: contact may cause irritation and temporary discomfort.

Inhalation: Primary route of exposure! Symptoms of acute exposure include coughing, wheezing, difficulty in breathing and upper respiratory track irritation. Prolonged and repeated exposure to concentrations in excess of the TLV or PEL may contribute to delayed respiratory complications.

Ingestion: No information available.

Skin: None expected, but constant contact may cause irritation.

##### EMERGENCY FIRST AID PROCEDURES:

Eyes: Flush with water immediate. Consult a physician if irritation persists.

Inhalation: Move away from exposure into fresh air conditions. If breathing difficulties continue, consult a physician.

Ingestion: Not believed to be necessary for coincidental ingestion. Consult a physician for ingestion of large quantities.

Skin: wash with mild soap and water.

#### SECTION VI REACTIVITY DATA

Stability: Stable

Conditions to avoid: NONE KNOWN

Incompatibility: (material to avoid) NONE KNOWN

Hazardous decomposition products: NONE KNOWN

Hazardous polymerizations: NONE KNOWN

Conditions to avoid: NONE KNOWN

#### SECTION VII SPILL OR LEAK PROCEDURE

Steps to be taken in case material is released or spilled: Minimize dust generation during cleanup. Vacuum or scoop spilled material into a container for disposal.

Waste disposal: Material is not considered hazardous. Comply with state, federal, and local regulations.

#### SECTION VIII SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: September 10, 2005

Prepared by: Scot Burns