

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTITY

Name TXI OPERATIONS, L.P.	Address 1341 W. MOCKINGBIRD LANE, DALLAS, TEXAS 75247
Emergency Telephone Number (972) 647-6700	Person Responsible for Preparation NANCY GARNETT
Common Name (used on label) DIAMOND PRO CALCINED CLAY	Date SEPTEMBER 1998
Chemical Name MONTMORILLONITE	Chemical Family CALCINED CLAY
Trade Name & Synonyms CALCINED CLAY	Formula DOES NOT APPLY

SECTION 2 - HAZARDOUS INGREDIENTS

<u>Hazardous Component</u>	<u>CAS #</u>	<u>% Typical</u>	<u>TLV (Units)</u>	<u>PEL (Units)</u>
MONTMORILLONITE	1302-78-9	90-93 bulk	3 mg/m ³ * 10 mg/m ³ (inhalable dust)	5 mg/m ³ *
QUARTZ (crystalline silica) 3-5% RESPIRABLE	14808-60-7	7-10 bulk	0.1 mg/m ³ *	10 mg/m ³ / (%SiO ₂ +2)

THIS PRODUCT IS A NON-COMBUSTIBLE, CHEMICALLY INERT MINERAL. THIS MINERAL SAMPLE CONTAINS A SMALL AMOUNT OF NATURALLY OCCURRING CRYSTALLINE SILICA AS QUARTZ. SEE SECTION 5 FOR HEALTH HAZARDS ASSOCIATED WITH QUARTZ. EXPOSURE TO DUST FROM THIS PRODUCT UNDER CONDITIONS OF NORMAL USE DOES NOT CAUSE ADVERSE EFFECTS.

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).
TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists (ACGIH).

SECTION 3 - PHYSICAL DATA

Boiling Point	Specific Gravity (H ₂ O = 1)
Vapor Pressure (mm = Hg)	
DOES NOT APPLY	2.2
Percent Volatile by Volume	Vapor Density (Air = 1)
Acetate)	
0%	DOES NOT APPLY
Percent Soluble in Water	Reactivity in Water
0%	WILL NOT EVOLVE FLAMMABLE OR TOXIC GASES
Appearance and Odor	
GRANULAR CLAY, BUFF TO GRAY COLOR, ODORLESS.	
<u>Hazardous Material Information System Identifier (HMIS)</u>	
HEALTH = 1*	FLAMMABILITY = 0 REACTIVITY = 0 PERSONAL PROTECTION = X

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point	Flammable Limits in Air (% by Volume)
WILL NOT IGNITE	Lower: DOES NOT APPLY Upper: DOES NOT APPLY
Extinguishing Media	Auto Ignition Temperature
DOES NOT APPLY	DOES NOT APPLY
Unusual Fire and Explosion Hazards	
NONE	
Special Fire Fighting Procedures	
NONE	

TXI051

SECTION 5 - HEALTH INFORMATION

Signs and Symptoms of Exposure - (1) Acute Overexposure - INHALATION: CONGESTION OF NASAL PASSAGES AND RESPIRATORY SYSTEMS. EYES: EXCESSIVE DUST MAY CAUSE ABRASION OF CORNEA. SKIN: NONE. INGESTION: NONE UNLESS MATERIAL HAS BEEN EXPOSED TO OTHER CHEMICALS.

Signs and Symptoms of Exposure - (2) Chronic Overexposure - INHALATION: DUST MAY CAUSE COUGHING AND SHORTNESS OF BREATH. EXCESSIVE EXPOSURE OF QUARTZ OVER AN EXTENDED PERIOD OF TIME MAY RESULT IN THE DEVELOPMENT OF PULMONARY DISEASES INCLUDING PNEUMOCONIOSIS, SILICOSIS (A PROGRESSIVE, DISABLING AND FATAL DISEASE OF THE LUNG), OR LUNG CANCER. DUST CAN CAUSE INFLAMMATION OF THE LINING TISSUE OF THE INTERIOR OF THE NOSE. EYES: INFLAMMATION OF THE CORNEA. SKIN: MINOR ABRASION. INGESTION: BLOCKAGE OF PASSAGEWAYS.

EXPOSURE TO DUST FROM THIS PRODUCT UNDER CONDITIONS OF NORMAL USE DOES NOT CAUSE ADVERSE EFFECTS.

Medical Conditions Generally Aggravated by Exposure
RESPIRATORY DISORDERS OR DISEASES, SUCH AS ASTHMA MAY BE AGGRAVATED BY EXPOSURE TO DUST OF THIS MATERIAL.

Chemical/Component Listed as Carcinogen		<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
QUARTZ ..	YES		YES-2A	NO
Other Exposure Limits				
NONE				

Emergency & First Aide Procedures for Indicated Routes of Entry

INHALATION: REMOVE FROM EXPOSURE. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CONSULT A PHYSICIAN. EYES: WASH EYES WITH COOL RUNNING WATER, LIFTING UPPER AND LOWER LIDS. DO NOT RUB EYES! IF IRRITATION PERSISTS, OBTAIN MEDICAL ASSISTANCE. SKIN: NONE NEEDED FOR NORMAL USE. INGESTION: IF MATERIAL HAS BEEN EXPOSED TO OTHER CHEMICALS, OBTAIN MEDICAL ATTENTION FOR THE CHEMICAL CONTAMINANT. IF LARGE AMOUNT OF UNCONTAMINATED MATERIAL IS SWALLOWED, GET IMMEDIATE MEDICAL ATTENTION.

SECTION 6 - REACTIVITY DATA

Stability Conditions to Avoid

STABLE .. DOES NOT APPLY

Incompatibility (Materials to Avoid)

HYDROFLUORIC ACID, TURPENTINE, VEGETABLE OIL, OR OTHER UNSATURATED ORGANIC COMPOUNDS MAY GENERATE HEAT.

Hazardous Decomposition or Combustion Products

NONE

Hazardous Polymerization

WILL NOT OCCUR

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Leaked or Spilled

CLEAN-UP OF SPILLS MAY REQUIRE PERSONAL PROTECTIVE EQUIPMENT TO PREVENT DUST EXPOSURES. SEE SECTION 8. USE CLEAN-UP PROCEDURES SUITABLE FOR ANY INERT DRY PRODUCT, SUCH AS SWEEPING OR VACUUMING. IF SPILLED ON WET, OILY, OR ICY SURFACE, PERSONAL SAFETY MAY BE ENHANCED BY LEAVING THE SPILLED MATERIAL TO ABSORB LIQUIDS AND TO IMPROVE TRACTION. AVOID CREATING DUST.

Waste Disposal Method

IF THIS MATERIAL, AS PROVIDED BY THE MANUFACTURER, BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA OF A HAZARDOUS WASTE AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY UNDER THE AUTHORITY OF THE RESOURCE CONSERVATION AND RECOVERY ACT (40 CFR 261). DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION 8 - PERSONAL PROTECTION INFORMATION

Respiratory Protection

NIOSH/MSHA APPROVED FOR PROTECTION AGAINST SILICA AND NUISANCE DUSTS, WHEN NECESSARY.

Ventilation

GENERAL OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV/PEL.

Protective Gloves

TO PROTECT FROM ABRASION

.....

Other Protective Clothing or Equipment

NONE

Eye Protection

SAFETY GLASSES, GOGGLES, OR FACE SHIELD,
WHEN NECESSARY TO PREVENT EYE CONTACT.

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

SHOULD BE STORED IN A MANNER TO PREVENT ACCUMULATIONS OF AIRBORNE DUST. DO NOT USE A BLOWER TO REMOVE DUST FROM CLOTHING OR ANY OTHER SURFACE.

Other Precautions

CA PROPOSITION 65: THIS PRODUCT CONTAINS RESPIRABLE CRYSTALLINE SILICA (QUARTZ) WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.