



1341 West Mockingbird Lane • Dallas, Texas 75247 • 972.647.6700 • www.txi.com

MATERIAL SAFETY DATA SHEET

Cemsm

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) ALL PURPOSE SAND	Date AUGUST 1998
Chemical Name SILICA SAND	Chemical Family SILICATE
Trade Name & Synonyms ALL PURPOSE SAND, PLAY SAND, SILICA SAND, QUARTZ SAND, CONCRETE SAND, MASON SAND, ASPHALT SAND, FILTER MEDIA, AND FOUNDRY SAND.	Formula PREDOMINANTLY SiO ₂ (See Section 2)

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Component	CAS #	% Typical	TLV (Units)	PEL (Units)
QUARTZ (Respirable) (Total Dust)	14808-60-7	50 - 100	0.1 mg/m ³ *	0.1 mg/m ³ * 30 mg/m ³ * %SiO ₂ +2

* Only particle sizes of 10 micrometers or less are considered to be respirable (breathable) and of possible hazard if exposure occurs.

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 DOES NOT APPLY	Specific Gravity (H₂O = 1) 2.6 - 2.7	Vapor Pressure (mm = Hg) DOES NOT APPLY
Percent Volatile by Volume 0%	Vapor Density (Air = 1) DOES NOT APPLY	Evaporation Rate (n=Butyl Acetate) DOES NOT APPLY
Percent Soluble in Water NEGLIGIBLE (<0.1%)	Reactivity in Water WILL NOT EVOLVE FLAMMABLE OR TOXIC GASES	
Appearance and Odor LIGHT COLORED, GRAINY SAND, NO ODOR.		

Hazardous Material Information System Identifier (HMIS)

HEALTH = 2* FLAMMABILITY = 0 REACTIVITY = 0 PERSONAL PROTECTION = X

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point WILL NOT IGNITE	Flammable Limits in Air (% by Volume) Lower: DOES NOT APPLY Upper: DOES NOT APPLY
Extinguishing Media DOES NOT APPLY	Auto Ignition Temperature DOES NOT APPLY
Unusual Fire and Explosion Hazards NONE	
Special Fire Fighting Procedures THIS MATERIAL, SAND, MAY BE USED TO SMOTHER FIRES.	

TXI009

SECTION 5 - HEALTH INFORMATION

Signs and Symptoms of Exposure - (1) Acute Overexposure - CONGESTION OF NASAL PASSAGES AND RESPIRATORY SYSTEMS. EXCESSIVE DUST MAY CAUSE SEVERE ABRASION OF CORNEA.

Signs and Symptoms of Exposure - (2) Chronic Overexposure - EXCESSIVE EXPOSURE, BY INHALATION, TO DUSTS OF THIS MATERIAL, OVER AN EXTENDED PERIOD OF TIME MAY RESULT IN THE DEVELOPMENT OF PULMONARY DISEASES INCLUDING PNEUMONOCOCONIOSIS, SILICOSIS, OR LUNG CANCER. DUST CAN CAUSE INFLAMMATION OF THE LINING TISSUE OF THE INTERIOR OF THE NOSE AND INFLAMMATION OF THE CORNEA.

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

Chemical/Component Listed as Carcinogen
QUARTZ

<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
YES	YES	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 RUNNING WATER. DO NOT RUB EYES! IF IRRITATION PERSISTS, OBTAIN MEDICAL ASSISTANCE.

SECTION 6 - REACTIVITY DATA

Stability

STABLE

Conditions to Avoid

DOES NOT APPLY

Incompatibility (Materials to Avoid)

NONE

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.

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.

Ventilation

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

Protective Gloves

TO PROTECT FROM ABRASION

Eye Protection

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

Other Protective Clothing or Equipment

GOGGLES OR OTHER EYE PROTECTION TO PREVENT DUST EXPOSURE INTO EYES.

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

SHOULD BE STORED IN A MANNER TO PREVENT ACCUMULATIONS OF AIRBORNE DUST.

Other Precautions

NONE DETERMINED