



BJ SERVICES COMPANY
MATERIAL SAFETY DATA SHEET

Region
USA

SECTION I - GENERAL INFORMATION

PRODUCT NAME: **CSE**
ITEM NUMBER : 499588, 488230
CHEMICAL DESCRIPTION: Silicon dioxide, amorphous
PRODUCT USE: Bonding
SUPPLIER: BJ Services Company
ADDRESS: 11211 FM 2920
Tomball, TX 77375
**EMERGENCY TELEPHONE NUMBER (800)424-9300 for CHEMTREC
(202)483-7616 Alaska and International**
PREPARED BY: BJ Services Environmental Group
(281)351-8131
DATE PREPARED: August 4, 2000 Supersedes: June 5, 1997

HMS HAZARD INDEX

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
PERSONAL PROTECTION: e

SECTION II - HAZARDOUS COMPONENTS

HAZARDOUS COMPONENTS	CAS #	PERCENT	HAZARD
Silicon dioxide	7631-86-9	78-98	Irritant
Iron oxide	1309-37-1	0.1-5.0	Irritant
Magnesium oxide	1309-48-4	0.1-5.0	Irritant
Carbon (total)	1333-86-4	<3.0	Irritant
Calcium oxide	1305-78-8	<2.0	Irritant

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT (METHOD): Does not burn
UPPER EXPLOSION LIMIT(% BY VOL): N.A.
LOWER EXPLOSION LIMIT(% BY VOL): N.A.
AUTO-IGNITION TEMPERATURE: N.A.
EXTINGUISHING MEDIA: Use appropriate media for surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: None- this dust is non-combustible even when suspended in air.
EXPLOSION DATA: None
HAZARDOUS COMBUSTION PRODUCTS: None

SECTION IV - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Skin and eye contact, inhalation, ingestion

ACUTE OVEREXPOSURE EFFECTS:

SKIN CONTACT: None known
SKIN ABSORPTION: Not absorbed by skin
EYE CONTACT: No effects listed
INHALATION: Inhalation of dust or particulates may be irritating to upper respiratory tract.
INGESTION: None expected

CHRONIC OVEREXPOSURE EFFECTS: Prolonged skin exposure, may cause drying of exposed skin.

EXPOSURE LIMITS:

HAZARDOUS COMPONENT	ACGIH TLV	OSHA PEL
Silicon dioxide	10 mg/m3 (total dust)	10 mg/m3 (total dust)
Iron oxide	5 mg/m3 (total dust)	10 mg/m3 (total dust)
Magnesium oxide	10 mg/m3 (total dust)	15 mg/m3 (total dust)
Carbon (total)	3.5 mg/m3 (total dust)	3.5 mg/m3 (total dust)
Calcium oxide	3.5 mg/m3 (total dust)	5.0 mg/m3 (total dust)

CARCINOGENICITY, REPRODUCTIVE EFFECTS:

Not listed as carcinogen- IARC, NTP or OSHA

TERATOGENICITY, MUTAGENICITY:

No effects listed

TOXICITY STUDIES:

LD(50) N.E.
LC(50) N.E.

SECTION V - FIRST AID PROCEDURES

FOR EYES: Immediately flush with plenty of water for at least 15 minutes. If irritation persists, contact a physician
FOR SKIN: Flush skin with water or wash with mild soap and water if available. If irritation persists, contact a physician.
FOR INHALATION: Remove to fresh air. If breathing is labored, give oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet and get medical attention.
FOR INGESTION: Contact a physician if any symptoms occur.

SECTION VI - PHYSICAL DATA

APPEARANCE AND ODOR: Gray powder, no odor

SPECIFIC GRAVITY: 2.20-2.50
VAPOR PRESSURE: N.A.
VAPOR DENSITY (air=1): N.A.
EVAPORATION RATE: N.A.
BOILING POINT: N.A.
FREEZING POINT: N.A.
SOLUBILITY IN H2O: Insoluble
pH: 6.0-9.0

SECTION VII - REACTIVITY DATA

CHEMICAL STABILITY: Stable
INCOMPATIBLE MATERIALS: Oxidizers and HF
HAZARDOUS POLYMERIZATION: Does not polymerize
HAZARDOUS DECOMPOSITION PRODUCTS: None

SECTION VIII - SPECIAL/PERSONAL PROTECTION

VENTILATION: The use of mechanical ventilation is recommended whenever this product is used in a confined space. Where engineering controls are not feasible, assure use is in an area where there is natural air movement.

RESPIRATORY PROTECTION: Use NIOSH approved dust/mist mask if TLV exceeded

PROTECTIVE GLOVES: Work gloves

EYE PROTECTION: Goggles

OTHER PROTECTIVE EQUIPMENT: Eyewash bottles or other rinsing equipment should be easily accessible.

SECTION IX - HANDLING PRECAUTIONS

LEAK AND SPILL PROCEDURES: Sweep up and place in suitable containers for reuse or disposal.

WASTE DISPOSAL: If this product becomes a waste it does not meet the requirements of a RCRA hazardous waste. Always dispose of according to all local, state, and federal laws and regulations.

HANDLING & SPECIAL EQUIPMENT: Avoid breathing dust. Caution should be observed when using oxidizers and hydrofluoric acid. Avoid breathing associated or resulting fumes.

STORAGE REQUIREMENTS: Avoid moisture to retain the physical characteristics of a fine dry powder.

SECTION X - REGULATORY INFORMATION

SHIPPING INFORMATION

PROPER SHIPPING NAME: Not DOT Regulated
HAZARD CLASS: N.A.
UN/NA NUMBER: N.A.
PACKING GROUP W/ "PG": N.A.
SUBSIDIARY RISK: N.A.
REPORTABLE QUANTITY (RQ): N.A.
EMERGENCY RESPONSE GUIDE #: N.A.

ENVIRONMENTAL INFORMATION

SARA TITLE III

SECTION 302/304

This product does not contain ingredients listed as an Extremely Hazardous Substance.

SECTION 311/312

Immediate, Delayed

SECTION 313

This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

OTHER REGULATORY INFORMATION

TSCA INVENTORY:

All of the components in this appear on the TSCA inventory.

CALIFORNIA PROP 65:

None of the chemicals on the current Proposition 65 list are known to be present in this product.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.