2500 PSI CONCRETE MIX

MATERIAL SAFETY DATA SHEET
(OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

MANUFACTURER/DISTRIBUTOR:
Paragon Building Products, Inc.
2895 Hamner Avenue
Norco, CA 92860

TRANSPORT EMERGENCY TELEPHONE #:
(951) 549-1155

INFORMATION TELEPHONE NUMBER:
(951) 549-1155

Product Use: CONCRETE MIX

Revision: August 2009
Prepared By: R. L. Frias

PRODUCT NAME:

PARAGON CONCRETE MIX 2500PSI

SECTION II – HAZARD IDENTIFICATION

Route(s) of Entry: Inhalation, Skin, Ingestion
Acute Exposure: Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and affect the mucus membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.
Chronic Exposure: Dust can cause inflammation in the interior lining tissue of the nose and of the cornea. Hypersensitive individuals may develop an allergic dermatitis.
Carcinogenicity: Portland and blended cements are manufactured from raw materials mined from the earth (limestone, marble, sand, shale etc.), and the heat process is provided by burning fossil fuels. Trace, but detectable, amounts of naturally occurring, and possibly harmful, elements may be found during chemical analysis. Under ASTM standards, Portland Cement may contain 0.75 % insoluble residue. A fraction of these residues may be free crystalline silica. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increase of scleroderma, tuberculosis, and kidney disorders.

Carcinogenicity Listings:	**NTP:**	**Known Carcinogen**
	OSHA:	**Not Listed as a Carcinogen**
	IARC: Monographs:	**Group 1 Carcinogen**
	California Proposition 65:	**Known Carcinogen**

NTP: The National Toxicology Program, in its "Ninth Report On Carcinogens" (released May 15, 2000) concluded that "Respirable Crystalline Silica (RCS), primarily quartz dust occurring in industrial and occupational settings, is known to be a human carcinogen, based on sufficient evidence of carcinogenicity from studies in humans indicating a relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in AIC, 1977:Brown et al., 1977; Hind et al., 1997)

IARC: The International Agency for Research on Cancer (IARC) concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the form of quartz or cristobalite from occupational sources", and there is "sufficient evidence in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)." The IARC evaluation noted that "Carcinogenicity may depend on inherent characteristics of the crystalline silica or on external factors affecting the biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risk to Humans. Volume 68, "Silica, Some Silicates, etc." (1997)

Symptoms of Exposure: Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water may cause third degree caustic burns.

Medical Conditions Generally Aggravated by Exposure: Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritations, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased occurrence of scleroderma, tuberculosis and possibly increases the risk of kidney lesions.

Chronic Exposure: Dust can cause inflammation in the interior lining tissue of the nose and of the cornea. Hypersensitive individuals may develop an allergic dermatitis. The product may contain trace (<0.05 %) amounts of chromium salts or compounds including Hexavalent Chromium or other metals found to be hazardous or toxic in some chemical forms. These metals are mostly present as trace substitution within the principal minerals.

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description	CAS #	ACGIH TLV	OSHA PEL 8 HOUR TWA	Vapor Pressure (MM HG)
Hydraulic Cement	65997-15-1	10 mg/m3	5mg respirable Dust m3 15 mg total Dust/m3	N/A
Magnesium Oxide	1309-48-4	15 mg total Dust/m3	10 total Dust/m3	N/A
Crystalline Silica	14808-60-7	0.10 mg Respirable Dust/m3	10 mg of respirable Dust/m3 % SIO02 + 2 **30 mg of total Dust/m3 5si)@ + 2 250 MILLION Particles/ft3 % SIO2 + 5**	N/A
Iron Oxide	1309-37-1	5 mg/m3	10 mg/m3	N/A

Other Limits: National Institute of Occupational Safety and Health (NIOSH) recommended standard maximum permissible concentration = 0.05 mg/m3 (respirable free silica) as determined by full-shift, for example, up to 10 hours per working day, 40 hours a week. See NIOSH Criteria for Recommended Standard Occupational Exposure to crystalline silica.

SECTION IV – FIRST AID MEASURES

Eyes: Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call a physician immediately.
Skin: Wash skin with cool water and pH-neutral soap or mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek medical treatment in the event of burns.
Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms don't subside. Inhalation of large amounts of Portland Cement requires immediate medical attention.
Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water and call physician.

SECTION V – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Non flammable
AUTOIGNITION TEMPERATURE:	Not established
LOWER EXPLOSIVE LIMIT (% in air):	Not established
UPPER EXPLOSIVE LIMIT (% in air):	Not established
EXTINGUISHING MEDIA:	Use water spray, foam, dry chemical or carbon dioxide
UNUSUAL FIRE AND EXPLOSION HAZARDS:	There is a possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.
SPECIAL FIRE FIGHTING INSTRUCTION:	Persons exposed to products of combustion should wear self contained apparatus and full protective equipment.
HARZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide, carbon monoxide, sulfur containing gases or formaldehyde.

SECTION VI – ACCIDENTAL RELEASE MEASURES

SPECIAL PROTECTION: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Personal equipment needs must be evaluated based on the information provided on this sheet and the special circumstances created by spill including: the material spilled, the quantity of spill, and the area in which the spill occurred. Never exceed any occupational exposure limits.

Clean-up: Avoid creating dust. Cover material with absorbent cloth, moisten, and collect for disposal.

SECTION VII - HANDLING AND STORAGE

HANDLING: Toxic or severely irritating material. Avoid contact or breathing the material. Use only in a well ventilated area. This product contains an ingredient that may release formaldehyde at heated cure temperatures.

STORAGE: Store in cool dry place.

SECTION VIII – EXPOSURE CONTROL/PERSONAL PROTECTION

EYE PROTECTION: Wear safety glasses with side shields when handling this product. Additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact by splashing or spraying liquid, or airborne material. Have an eye station available.
SKIN PROTECTION: Prevent contact with this product. Use water and chemical resistant gloves, long sleeved shirt, an apron, and other protective equipment depending on the conditions of use.
GLOVES: Butyl rubber.
RESPIRATORY PROTECTION: Respiratory protection may be required to avoid overexposure when handling this product. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Use a NIOSH approved air purifying respirator with a dust and mist filter. Respirator should be selected by and used following these requirements.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
COLOR:	White or Grey
ODOR:	Odorless
SPECIFIC GRAVITY:	2.7
SOLIDS (% by weight):	100%
pH:	Not established
EVAPROATION RATE:	Not established
VAPOR PRESSURE:	Not established
VAPOR DENSITY:	Not established

SECTION X - REACTIVITY

STABILITY: Stable under normal condition.
INCOMPATIBILITY: (Materials to Avoid): Contact of silica with powerful oxidizing agents such as fluorine, chlorine triflouride, manganese trioxide, or oxygen diflouride may cause fire.
HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – Silicon Tetra Fluoride.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITION TO AVOID: Keep dry until used to preserve product utility.

SECTION XI – TOXICOLOGICAL INFORMATION

ROUTES OF ENTRY:	Inhalation, Ingestion
TOXICITY TO ANIMALS:	LD50 Not Available LC50 Not Available
CHRONIC EFFECTS ON HUMANS:	Conditions aggravated by exposure include eye disease, skin disorders and chronic respiratory conditions.

SECTION XII – ECOLOGICAL INFORMATION

OVERVIEW: No ecological information available

SECTION XIII – DISPOSAL CONSIDERATIONS

The product is not classified as hazardous waste under the U. S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements.

SECTION XIV – TRANSPORT INFORMATION

Not hazardous under U. S. DOT TDG regulations.

SECTION XV – OTHER REGULATORY CONSIDERATIONS

U. S. OSHA 29CFR 1910.1200: Considered hazardous under this regulation and should be included in the employer's hazard communication program.
SARA (Title III) Sections 311 & 312: Qualifies as a hazardous substance with delayed health effects.
SARA (Title III) Section 313: Not subject to reporting requirements.
TSCA (May) 1997): Some substances are on the TSCA inventory list.
FEDERAL HAZARDOUS SUBSTANCES ACT: Is a hazardous substance subject to statutes promulgated under the subject act.
CANADIAN ENVIROMENTAL PROTECTION ACT: Not Listed.
CANADIAN WHMIS: Considered to be hazardous material under the Hazardous Products Act as defined by Controlled Products Regulations (Class D2A, E –Corrosive Material) and subject to the requirements of the Health Canada's Workplace
HAZARD MATERIAL INFORMATION (WHMIS): This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Product Act (HPA) and the CPR.

SECTION XVI – OTHER INFORMATION

HMIS-III	HEALTH -	0 = No significant health risk
		1 = Irritation or minor reversible injury possible
		2 = Temporary or minor injury possible
		3 = Minor injury possible unless prompt action is taken
		4 = Life threatening, major or permanent damage possible
FLAMMABILITY -		0 = Material will not burn
		1 = Material must be preheated before ignition will occur
		2 = Material must be exposed to high temperatures before ignition
		3 = Material capable of ignition under normal temperature
		4 = Flammable gases or very volatile liquids, may ignite spontaneously
PHYSICAL HAZARD -		0 = Material is normally stable under fire condition
		1 = Material normally unstable but may become unstable at high temperature
		2 = Materials that are unstable and may undergo reaction at room temperature
		3 = Materials that may form explosive mixtures with water
		4 = Materials that are readily capable of explosive water reaction

ABBREVIATIONS:

ACGIH	American Conference of Government Industrial Hygienist
CAS	Chemical Abstract Service
CERLA	Comprehensive Environmental Response, Compensation Liability Act
CFR	Code of Federal Regulation
CPR	Controlled Product Regulation (Canada)
DOT	Department of Transportation
IARC	International Agency for Research on Cancer
MSHA	Mine Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicity Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TWA	Time-Weighted Average
WHMIS	Workplace Hazardous Material Information System

NOTE: The information and recommendations contained herein are believed to be correct; however, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica in our product.