SAFETY DATA SHEET

PRODUCT CODE: 8120

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **CM 8120 PART A**
PRODUCT CODES: **8120 A**

MANUFACTURER: **QuestMark Flooring, Div. Of Centimark Corporation**
STREET ADDRESS: **12 Grandview Circle**
CITY, STATE, ZIP: **Canonsburg, PA 15317**

INFORMATION PHONE: **724-743-7777**
EMERGENCY PHONE: **Chemtrec 800-424-9300**

PREPARED BY: **Thomas McElwaine**

DATE REVISED: **7/20/14**

Chemical Name or Class: Epoxy mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: **Acute oral toxicity category 4, Acute dermal toxicity category 4, Acute toxicity inhalation category 4, Skin corrosion category 2, Serious eye irritation category 2A, skin sensitizer category 1B, Carcinogenicity category 1, Chronic hazards to aquatic environment category 2**

GHS Label Elements and Precautionary Statements:

Label Elements: Health hazard, Exclamation Mark, Aquatic Toxicity

Hazard Statements:

Warning: Harmful if swallowed
Warning: Harmful in contact with skin
Warning: Causes skin irritation
Warning: May cause an allergic skin reaction
Warning: Causes serious eye irritation
Warning: Harmful if inhaled
Danger: May cause cancer
Toxic to aquatic life with long lasting effects

Risk Phrases:

R20 Harmful by inhalation
R21/22 Harmful in contact with skin and if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin
R42/43 May cause sensitization by inhalation and skin contact
R45 May cause cancer
R52 Harmful to aquatic organisms
R66 Repeated exposure may cause skin dryness or cracking

Precautionary statements:

P102 Keep out of reach of children.
P103 Read label before use
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 Keep container tightly closed.
P234 Keep only in original container.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.

HMIS HAZARD CLASSIFICATION

HEALTH: 1 **FLAMMABILITY: 1** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: G**

POTENTIAL HEALTH EFFECTS

EYES:

MAY CAUSE IRRITATION BUT NO CORNEAL INJURY IS LIKELY.

SKIN:

MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE.

INGESTION:

THIS MATERIAL HAS A PROBABLE LOW ACUTE ORAL TOXICITY.

INHALATION:

NO GUIDE FOR CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO THE NOSE, THROAT OR MUCOUS MEMBRANES..

HEALTH HAZARDS (ACUTE AND CHRONIC):

EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATION OF VAPOR. EYES: INJURY IF UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: yes IARC: yes

ADDITIONAL CARCINOGENICITY INFORMATION:

Some colors may contain carbon black - Explanation Of Carcinogenicity for carbon: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2BTitanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
MODIFIED DIGLYCIDYL ETHER OF BISPENOL A	25068-38-6	NONE	NONE	NONE	
ALKYL GLYCIDYL ETHER	69609-97-2	NONE	NONE	NONE	
HYDROCARBON RESIN	NON-HAZARDOUS	NONE	NONE	NONE	
*Naphthalene	91-20-3	10ppm	10ppm	NONE	<0.05%
HYDROXY MODIFIED RESIN	NON-HAZARDOUS	NONE	NONE	NONE	
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	
Colors may contain:					
Titanium Dioxide	13463-67-7	10mg/m3	10mg/m3	5mg/m3	
*CARBON	1333-86-4	3.5PPM	3.4PPM	NONE	<1.0
Precipitated Silica	112926-00-8	NONE	80mg/m3	NONE	
Iron III oxide	1309-37-1	10mg/m3	5mg/m3	NONE	
Yellow Pigment	Not available	NONE	NONE	NONE	
Zinc Sulfate (component of yellow pigment)	1314-98-3	NONE	NONE	NONE	
Barium Sulfate (component of yellow pigment)	7727-43-7	NONE	NONE	NONE	
Titanium Dioxide (component of yellow pigment)	13463-67-7	NONE	NONE	NONE	
Pigment yellow 65 (component of yellow pigment)	6528-34-3	NONE	NONE	NONE	
Iron III oxide	20344-49-4	15mg/m3	5mg/m3	NONE	
C.I. Pigment Blue	147-14-8	1mg/m3	1mg/m3	NONE	
Aluminum Oxide	1344-28-1	15mg/m3	10mg/m3	NONE	
Silica, amorphous	7631-86-9	80mg/m3	10mg/m3	NONE	
Iron Oxide Yellow	51274-00-1	15mg/m3	10mg/m3	NONE	
Silica, amorphous	7631-86-9	80mg/m3	10mg/m3	NONE	

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

LOW IN TOXICITY, INDUCE VOMITING ONLY IF LARGE AMOUNTS OF MATERIAL ARE INGESTED, AND OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE CONSULT WITH A PHYSICIAN.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: not available** **LOWER: not available**

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:
DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL FIRE EXPOSED CONTAINERS WITH WATER.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBENT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
STORE IN A COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS
OTHER PRECAUTIONS:
AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CAN NOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:
USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. GENERAL EXHAUST IS USUALLY SUFFICIENT IN LIEU OF NIOSH RESPIRATOR
VENTILATION :
GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS
PROTECTIVE GLOVES:
IMPERVIOUS GLOVES – NEOPRENE OR RUBBER
EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: MEDIUM VISCOSITY LIQUID IN VARYING COLORS OR CLEAR
BOILING POINT OR RANGE: 200 TO 279F
VAPOR DENSITY (AIR = 1): N/A
SPECIFIC GRAVITY (H2O = 1): 1.1
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: NEGLIGIBLE

Odor Threshhold: N/A
pH: N/A
Melting point/freezing point: N/A
Vapor Pressure: N/A
Auto Ignition Temperature: N/A
Partition Coefficient: n-octanol/water: N/A
Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY:
STABLE
CONDITIONS TO AVOID (STABILITY):
AVOID EXCESSIVE HEAT OR OPEN FLAMES.
INCOMPATIBILITY (MATERIAL TO AVOID):
CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
CO2, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component CAS# 25068-38-6: Moderate sensitizer, slight eye irritant, moderate skin irritant, Oral LD50 >5000 mg/kg (rat), Dermal LD50 >6000 mg/kg (rabbit)
Component CAS# 68609-97-2: possible sensitizer, eye and skin irritant, Oral LD50 >10000 mg/kg (rat), Inhalation LD50 – no microscopic changes
Component Benzyl Alcohol: Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.
Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.
Component Carbon: IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg
Component CAS# 112926-00-8: LD50 (rat >5000 mg/kg, LD50 dermal (rat) >2000 mg/kg
Component Iron III oxide CAS# 1309-37-1: Acute Oral Toxicity LD50 >5000 mg/kg (rat). Acute Dermal Toxicity LD50 >5000 mg/kg (rat)
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.. Acute oral value of 20 gm/kg or greater in rats
Component Iron III oxide CAS# 20344-49-4: Acute Oral Toxicity LD50 >5000 mg/kg (rat).
Component CAS# 2210-79-9: Acute Health Hazard -Ingestion : LD50 : 5,800 mg/kg Species : Rat. Inhalation : LC50 (4 h) : 1220 ppm Species : Rat. Skin. : LD50 : > 2,000 mg/kg Species : Rabbit. Method : Estimated. Eye irritation/corrosion : Mild eye irritation Acute dermal irritation/corrosion : Severe skin irritation. Sensitization : May cause sensitization by skin contact.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component CAS# 25068-38-6: Biodegradability (Modified Sturm Method) 12%, Fish toxicity: Rainbow trout (96hr) LC50 1.5mg/l, Zebra Fish (96hr) LC50 2.4 mg/l. Invertebrate Toxicity: Daphnia Toxicity (24hr) EC 50 3.6 mg/l
Component Benzyl Alcohol: EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD_2 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochinus), LC50 (96hr) 460 ml/l Fathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l
Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitate (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50
Component CAS# 112926-00-8: Ecotoxicity: EC50 (fish) .10000 mg/l (daphnia >10000 mg/l
Component Iron III oxide CAS# 1309-37-1 Acute and Prolonged Toxicity to fish LC0 >1000 mg/l (golden Orfe). Acute toxicity to Aquatic Invertebrates EC0 > 10000 mg/l (water flea). Toxicity to Microorganisms EC0 > 1000mg/l (pseudomonas putida)
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.
Component Iron III oxide CAS# 20344-49-4: Acute and Prolonged Toxicity to fish LC0 >1000 mg/l (golden Orfe). Toxicity to Microorganisms EC0 > 10000mg/l (pseudomonas putida)

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:.
DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAW.

SECTION 14: Transport Information

DOT: Not Regulated
IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS Bisphenol A Diglycidyl Ether Polymer), 9, PGIII, Marine Pollutant

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component CAS# 25068-38-6: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, WHMIS class D2B; Is on the New Jersey Right to Know list,; is on the PA Right to Know List;
Component CAS# 68609-97-2: Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, Is on the New Jersey Right to Know list; is on the PA Right to Know List.
Component HYDROCARBON RESIN: Component contains 0.01-0.06 wt% Naphthalene CAS# 91-20-3 with a CERCLA RQ of 100 pounds. Component is on the TSCA list and Canadian DSL list. Component does not contain any reportable chemicals above the deminimus level for section 313. Component is not hazardous as defined by CFR 1910.1200 or Title III section 312/313 of the superfund amendment. Naphthalene is known to the state of California to cause cancer. Naphthalene is on the Pennsylvania, Massachusetts and New Jersey right to know lists.
Component HYDROXY MODIFIED RESIN.: Component is not hazardous as defined by CFR 1910.1200 and under the provisions of Title III Section 311/312 of the Superfund amendments and Reauthorization Act. Component is on the TSCA list..

Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada
Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List.
Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN.
Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada
Component CAS# 112926-00-8: Is not classified as dangerous. National Chemical Inventory listings include – AICS, DSL, IECSC, EINECS, ENCS, KECI, NZLOC, PICCS, TSCA,
Component Iron III oxide CAS# 1309-37-1 Listed on TSCA Inventory. Section 313/312 hazard category: Chronic healtgh hazard. Potential exposure to all of the California proposition 65 have been determined to be below the No significant risk level (NSRL). Component and its impurities (1%) are on the Pennsylvania, New Jersey right to know substance lists. Component contains the following chemicals listed on the New Jersey and Pennsylvania RTK special hazardous Substance lists: Manganese CAS# 7439-96-5 (0.7%) and Aluminum CAS# 7429-90-5 (0.29%). Component contains the following ingredients which are on the Pennsylvania, Massachusetts hazardous substance lists: Chromium CAS# 7440-47-3 (0.075%) and Nickel CAS# 7440-02-0 (0.04%) Component contains the following chemicals on the California Proposition 65 list known to the state of California to be carcinogenic: Nickel CAS# 7440-02-0 (0.04%) and Cobalt CAS# 7440-48-4 (30 ppm).
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.
Component Iron III oxide CAS# 20344-49-4: Listed on TSCA Inventory. Potential exposure to all of the California proposition 65 chemicals have been determined to be below the No significant risk level (NSRL). Components are on the Pennsylvania right to know substance list. Component contains the following chemicals listed on the Pennsylvania RTK special hazardous Substance lists: chromium CAS# 7440-47-3 (0.02%) and nickel CAS# 7440-02-0 (0.015%). Component contains the following ingredients which are on the Massachusetts hazardous substance lists: Chromium CAS# 7440-47-3 (0.02%), arsenic CAS# 7440-38-2 (60ppm), Berrylium CAS# 7440-41-7 (1ppm) and Nickel CAS# 7440-02-0 (0.015%) Component contains the following chemicals on the California Proposition 65 list known to the state of California to be carcinogenic: Nickel CAS# 7440-02-0 (0.015%), arsenic CAS# 7440-38-2 (60ppm), Berrylium CAS# 7440-41-7 (1ppm) and Cobalt CAS# 7440-48-4 (70ppm)..
Component CAS# 147-14-8: Component is on the TSCA List. and not controlled under WHMIS. Component is a CERCLA hazardous substance
Component CAS# 1344-28-1: Component is on the Massachusetts, New Jersey, Pennsylvania right to know lists. Component is on TSCA list and Canada DSL.
Component CAS# 7631-86-9: Component is on the Minnesota right to know list. Component is on TSCA list and Canada DSL.
Component CAS# 51274-00-1: Component is on the TSCA list and Canada DSL.
Component CAS# 7631-86-9: Component is on the Minnesota right to know list. Component is on TSCA list and Canada DSL.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available
See Section 1 for date of preparation

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **CM 8120 PART B**
PRODUCT CODES: **8120 B**

MANUFACTURER: QuestMark Flooring, Div. Of Centimark Corporation
STREET ADDRESS: 12 Grandview Circle
CITY, STATE, ZIP: Canonsburg, PA 15317

INFORMATION PHONE: 724-743-7777
EMERGENCY PHONE: Chemtrec 800-424-9300

PREPARED BY: Thomas McElwaine

DATE REVISED: 7/20/14

Chemical Name or Class: Polyamine mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Acute oral toxicity category 4, Acute dermal toxicity category 4, Skin corrosion category 2, skin sensitizer category 1B, Serious eye damage category 1, Acute toxicity inhalation category 4, Chronic hazards to aquatic environment category 2
GHS Label Elements and Precautionary Statements:
Label Elements: Exclamation Mark, Corrosion, Aquatic Toxicity
Hazard Statements:
Warning: Harmful if swallowed
Warning: Harmful in contact with skin
Warning: Causes skin irritation
Warning: May cause an allergic skin reaction
Danger: Causes serious eye damage
Warning: Harmful if inhaled
Harmful to aquatic life with long lasting effects
Risk Phrases:
R20 Harmful by inhalation
R21/22 Harmful in contact with skin and if swallowed
R22 Harmful if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin
R42/43 May cause sensitization by inhalation and skin contact
R52 Harmful to aquatic organisms
R53 May cause long-term adverse effects in the aquatic environment
R66 Repeated exposure may cause skin dryness or cracking
Precautionary statements:
P102 Keep out of reach of children.
P103 Read label before use
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 Keep container tightly closed.
P234 Keep only in original container.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 Wear respiratory protection.

HMIS HAZARD CLASSIFICATION
HEALTH: 2 **FLAMMABILITY: 1** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: G**

POTENTIAL HEALTH EFFECTS
EYES:
WILL CAUSE BURNS TO THE EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES.
SKIN:
WILL CAUSE BURNS TO THE SKIN.
INGESTION:
LIQUID CAN CAUSE SEVERE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.
INHALATION:
HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA, AND DIZZINESS.
HEALTH HAZARDS (ACUTE AND CHRONIC):

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO LISTED INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	
1,2-DIAMINOCYCLOHEXANE 694-83-7	NONE	NONE	NONE		
ALIPHATIC AMINES	Unknown NONE	NONE	NONE		
TRIS-2,4,6-dimethylaminomethylphenol	90-72-2	NONE	NONE	NONE	
Bis(dimethylaminomethyl) phenol	71074-89-0	NONE	NONE	NONE	
3-AMINOMETHYL-3,5,5-TRIMETHYL CYCLOHEXANE	2855-13-2 NONE	NONE	NONE		
2-HYDROXYBENZOIC ACID	69-72-7	NONE	NONE	NONE	
DIETHYLENETRIAMINE	111-40-0	1ppm	1ppm	NONE	
*BISPHENOL A	80-05-7	NONE	NONE	NONE	4

***INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.**

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS. GET IMMEDIATE MEDICAL ASSISTANCE.

SKIN:

FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: not available** **LOWER: not available**

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTING. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID TO SALVAGE TANK. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

OTHER PRECAUTIONS:
MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:
NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS. FOR EMERGENCIES A SELF-CONTAINED BREATHING APPARATUS OR A FULL FACE RESPIRATOR IS RECOMMENDED.
VENTILATION:
AVOID BREATHING VAPORS. VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.
PROTECTIVE GLOVES:
IMPERVIOUS GLOVES – NEOPRENE OR RUBBER
EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.
WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: AMBER CLEAR LIQUID WITH AMINE ODOR.
BOILING POINT OR RANGE: 155 TO 401 DEG F
VAPOR DENSITY (AIR = 1): N/A
SPECIFIC GRAVITY (H2O = 1): 1.0
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: NEGLIGIBLE

Odor Threshhold: N/A
pH: N/A
Melting point/freezing point: N/A
Vapor Pressure: N/A
Auto Ignition Temperature: N/A
Partition Coefficient: n-octanol/water: N/A
Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY:
STABLE
CONDITIONS TO AVOID (STABILITY):
AVOID EXCESSIVE HEAT OR OPEN FLAMES.
INCOMPATIBILITY (MATERIAL TO AVOID):
CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
CO2, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.
HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component CAS# 694-83-7: LD50 = 2,300 mg/kg (species rat) May cause sensitization by contact or inhalation
Component Benzyl Alcohol: Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.
Component CAS# 2855-13-2: Oral LD50 rat 1030 mg/kg, Skin irritation – Corrosive subcategory 1C where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Eye irritation – Risk of serious damage to eyes. Product Sensitization (Magnusson-Kingman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg
Component CAS# 69-72-7: Acute Oral Toxicity LD50 (rat) = 891 mg/kg (behavioral somnolence (general depressed activity, Behavioral muscle weakness)). Acute Inhalation LC50 (rat) >900 mg/m3, 1 hr. Acute Dermal LD50 (rabbit) >10,000 mg/kg. Skin Irritation (rabbit) – mild skin irritation - 24hr. Eye Irritation (rabbit) – severe eye irritation.
Component CAS# 111-40-0: inhalation: LC50 (4hr) <0.3 mg/l (rat); Skin: LD50 >5000 mg/kg(rabbit) Ingestion: LD50 2960 mg/kg (rat). Severe Eye irritation, Moderate skin irritation, May cause sensitization by skin contact or inhalation.

Component CAS# 80-05-7: Ingestion LD50 Oral (rat) = 3250 mg/kg. Irritation Data Skin (rabbit) 500 mg/24 hr (mild irritation effects. Irritation data eyes (rabbit) 0.25mg/24 hr (severe irritation effect). Skin contact or inhalation may cause sensitization. Component may impair fertility based on toxicology of similar products.
Component CAS# 90-72-2 and CAS# 71074-89-0: Oral LD50 (rat) 1200 mg/kg; Dermal LD50 (rabbit) 1280 mg/kg; Inhalation LC50 (rat) > 0.5 mg/liter/1 hour; Severe irritant to eyes of a rabbit. Severe irritant to the skin of a rabbit. Corrosive to the skin of a rabbit.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.
Component data:
Component Benzyl Alcohol: EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD_2 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochinus), LC50 (96hr) 460 ml/l Fathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l
Component CAS# 2855-13-2: Biodegradability 42% and is not readily biodegradable. Bioaccumulation: - no significant accumulation of the substance in organisms is to be expected. Mobility: The soil mobility of the substance is only minimally affected by adsorption to soil components. Toxicity to fish: LC50 Lauciscus idus 110 mg/l (96hr). Toxicity to Daphnia NOEC 3 mg/l (504hr). EC50 Daphnia magna 23 mg/l (48 hr). ErC50 scenedesmus subspicatus 50 mg/l (72 hr). NOEC scenedesmus subspicatus 1.5 mg/l (72 hr). Toxicity to bacteria: EC10 Pseudomonas putida 1120 mg/l (18 hr).
Component CAS# 69-72-7: Toxicity to Fish LC50 (Leuciscus idus – 96 mg/l. Toxicity to Daphnia magna – 105mg/l, 24 hr. ComponentMutagenic Effects: Mutagenic for bacteria and/or yeast. Developmental toxicity: Classified reproductive system toxin/female, development toxin possible.
Component CAS# 80-05-7: Acute Ecotoxicity tests LC50 (fathead minnow) 96 hr = 4.6 mg/l. LC50 (daphnia magna) 48 hr = 3.9 mg/l. LC50 (algae) 96 hr = 2.73 mg/l.
Component CAS# 90-72-2 and CAS# 71074-89-0: Toxicity: LC50 fish 447.8 mg/l (96 hr). LC50 Crust 28.2 mg/l (48 hr). EC50 alga 34.8 mg/l (96 hr)

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
DISPOSE OF MATERIAL AS A HAZARDOUS WASTE ACCORDING TO FEDERAL, STATE, AND LOCAL REGULATIONS.

SECTION 14: Transport Information

DOT: : UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS DIETHYLENETRIAMINE, ISOPHORONE DIAMINE), 8, PG III,

IMO/IMDG : UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS DIETHYLENETRIAMINE, ISOPHORONE DIAMINE), 8, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

No data for the product itself.
Component data:
Component CAS# 694-83-7: Component is on the TSCA list and Canada DSL, EINECS, AICS, ENCS, ECL, SEPA, lists or inventory.
Component CAS# 694-83-7, Benzyl Alcohol CAS# 100-51-6, Aliphatic amines: WHMIS Trade Secret Registration Number 5096 grant date 5/4/2004..
Component Aliphatic Amines: on TSCA, EINECS, AICS, ENCS, ECL, SEPA lists or inventory.
Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada, EINECS, AICS, ENCS, ECL, SEPA, lists or inventory.
Component CAS# 2855-13-2: Acute health hazard. Ingredients on TSCA. International Chemical status listed/registered – EINECS/ELINCS, DSL, AICS, MITI, TCOL, PICCS, China, New Zealand.
Component CAS# 69-72-7: Component is on the Pennsylvania and New Jersey right to know lists. Component is on the TSCA and Canada DSL lists.
Component CAS# 111-40-0: on TSCS List, OSHA hazard class – Irritant. Regulatory List: On TSCA, on EINECS, DSL, AICS, ENCS, ECL, SEPA, PICCS.
Component CAS# 80-05-7: This component is subject to SARA section 313 reporting requirements. Component is on TSCA EINECS, AICS, ENCS, ECL, SEPA, PICCS and Canada DSL lists.
Component CAS# 90-72-2 and 71074-89-0 EEC symbol – Harmful, harmful if swallowed (R22) Irritating to eyes and skin (R36/38). Component is on the Canada DSL, TSCA, EINECS, AICS, ENCS, ECL, SEPA, PICCS lists

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available
See Section 1 for date of preparation

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **CM 8120 PART C**
PRODUCT CODES: **8120 C**

MANUFACTURER: **QuestMark Flooring, Div. Of Centimark Corporation**
STREET ADDRESS: **12 Grandview Circle**
CITY, STATE, ZIP: **Canonsburg, PA 15317**

INFORMATION PHONE: **724-743-7777**
EMERGENCY PHONE: **Chemtrec 800-424-9300**

PREPARED BY: **Thomas McElwaine**

DATE REVISED: **7/20/14**

Chemical Name or Class: **sand**

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: **Carcinogenicity category 1, Specific target organ toxicity following repeated exposure category 1, Skin irritation category 3, Serious eye irritation category 2B**

GHS Label Elements and Precautionary Statements:
Label Elements: Health hazard, Exclamation mark
Hazard Statements:
DANGER: May cause cancer
Warning: Causes damage to organs through prolonged or repeated exposures (lungs, respiratory system)
Warning: Causes mild skin irritation
Warning: Causes eye irritation
Risk Phrases
R20 Harmful by inhalation
R33 Danger of cumulative effects
R36/37 Irritating to eyes and respiratory system
R45 May cause cancer
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation
R68/20 Harmful: possible risk of irreversible effects through inhalation
Precautionary statements:
P102 Keep out of reach of children.
P103 Read label before use
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P281 Use personal protective equipment as required.
P284 Wear respiratory protection.

HMIS HAZARD CLASSIFICATION
HEALTH: 2 **FLAMMABILITY: 0** **REACTIVITY: 0** **PERSONAL PROTECTIVE EQUIPMENT: E**

POTENTIAL HEALTH EFFECTS
EYES:
MAY CAUSE REDDENING OF THE EYES OR EYE IRRITATION FROM AIRBORNE PARTICLES.
SKIN:
NONE KNOWN
INGESTION:
NONE KNOWN
INHALATION:
PROLONGED EXPOSURE TO RESPIRABLE CRYSTALLINE QUARTZ MAY CAUSE DELAYED LUNG INJURY (SILICOSIS). ACUTE OR RAPIDLY DEVELOPING SILICOSIS MAY OCCUR IN A SHORT PERIOD OF TIME IN HEAVY EXPOSURE IN SOME APPLICATIONS SUCH AS SAND BLASTING.
HEALTH HAZARDS (ACUTE AND CHRONIC):
MAY CAUSE DELAYED SILICOSIS OR RAPID SILICOSIS IN SOME OCCUPATIONS SUCH AS SANDBLASTING, SILICOSIS IS A FORM OF A DISABLING PULMONARY FIBROSIS WHICH CAN BE PROGRESSIVE AND COULD LEAD TO DEATH. INHALATION MAY LEAD TO LUNG SCARRING AND MASSIVE FIBROSIS WHICH COULD BE ACCOMPANIED BY RIGHT HEART ENLARGEMENT, HEART FAILURE, OR PULMONARY FAILURE, SMOKING AGGRAVATES THE EFFECTS OF EXPOSURE.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS CAN BE AGGRAVATED BY EXPOSURE
CARCINOGENICITY
OSHA: NO **NTP: YES** **IARC: YES**

ADDITIONAL CARCINOGENICITY INFORMATION:
IARC HAS DETERMINED THAT CRYSTALLINE SILICA INHALED IN THE FORM OF QUARTZ IS CARCINOGENIC TO HUMANS (GROUP 1- CARCINOGENIC TO HUMANS). THE NTP CLASSIFIES RESPIRABLE CRYSTALLINE SILICA AS REASONABLY ANTICIPATED TO BE A CARCINOGEN.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
SILICON DIOXIDE	14808-60-7	10mg/m3	.1mg/m3	.1mg/m3	100

SECTION 2 NOTES:
*****No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.*****
FOLLOW OSHA HAZARD COMMUNICATION RULE 29CFR SECTIONS 1910.1200, 1915.99, 1917.28, 1918.9, 1926.59, AND STATE AND LOCAL COMMUNITY RIGHT TO KNOW LAWS. WE RECOMMEND THAT SMOKING BE PROHIBITED IN AREAS WHERE RESPIRATORS MUST BE USED.

SECTION 4: FIRST AID MEASURES

EYES:
FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN IF CONDITIONS WARRANT.
SKIN:
SKIN CONTACT WILL NORMALLY CAUSE NO HEALTH RISKS
INGESTION:
IF INGESTED, CONSULT A PHYSICIAN
INHALATION:
REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.
NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, (% by volume) **UPPER: not available** **LOWER: not available**
FLASH POINT^0 F: N/A
METHOD USED:
N/A
EXTINGUISHING MEDIA:
OTHER
SPECIAL FIRE FIGHTING PROCEDURES:
CRYSTALLINE SILICA IS NEITHER A FIRE NOR AN EXPLOSION HAZARD
UNUSUAL FIRE AND EXPLOSION HAZARDS:
NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR RESPIRATOR AND USE DUSTLESS HANDLING EQUIPMENT TO CLEAN UP LARGE SPILLS, PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. FLUSH AREA WITH WATER AFTER PICKUP OF MATERIAL.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
STORE IN COOL DRY PLACE. PROPERLY LABEL ALL CONTAINERS AND RESEAL ALL PARTIALLY USED CONTAINERS. AVOID CREATING ANY DUST WHEN WORKING WITH THIS MATERIAL.
OTHER PRECAUTIONS:
AVOID BREATHING DUST GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. PROVIDE TRAINING FOR YOUR EMPLOYEES RELATING TO OCCUPATIONAL EXPOSURE TO QUARTZ DUST. SEE ASTM STANDARD E1132-86 STANDARD PRACTICE FOR HEALTH REQUIREMENTS RELATING TO EXPOSURE TO QUARTZ DUST. IF BETTER THAN 500 X PEL USE A SELF CONTAINED BREATHING APPARATUS. IF SANDBLASTING, USE ANY TYPE CE SUPPLIED AIR RESPIRATOR WITH FULL FACE PIECE OR HOOD.
Safety phrases
S22 Do not breathe dust
S25 Avoid contact with eyes
S38 In case of insufficient ventilation wear suitable respiratory equipment
S39 Wear eye/face protection

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER-EXPOSURE TO QUARTZ DUST. PROVIDE SUFFICIENT EXHAUST TO KEEP EXPOSURE LEVELS BELOW THE ACGIH PEL.

VENTILATION:
USE EXHAUST SUFFICIENT TO MAINTAIN AIRBORNE PARTICULATES BELOW THE ACGIH PEL LIMITS ESTABLISHED.

PROTECTIVE GLOVES:
N/A

EYE PROTECTION:
SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
PROVIDE ANY EQUIPMENT NECESSARY TO PREVENT THE INHALATION OF QUARTZ DUST.

WORK HYGIENIC PRACTICES:
OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: **WHITE OF TAN SAND GRANULAR CRUSHED OR GROUND- NO ODOR**
BOILING POINT OR RANGE ^{0} F: **N/A**
VAPOR DENSITY (AIR = 1): **N/A**
SPECIFIC GRAVITY (H2O = 1): **2.6**
EVAPORATION RATE: **N/A**
SOLUBILITY IN WATER: **INSOLUBLE IN WATER**

Odor Threshhold: **N/A**
pH: **N/A**
Melting point/freezing point: **N/A**
Vapor Pressure: **N/A**
Auto Ignition Temperature: **N/A**
Partition Coefficient: n-octanol/water: **N/A**
Decomposition Temperature: **N/A**

SECTION 10: STABILITY AND REACTIVITY

STABILITY:
STABLE

CONDITIONS TO AVOID (STABILITY):
CONTACT WITH POWERFUL OXIDIZING AGENTS SUCH AS FLUORINE, CHLORINE, TRIFLUORIDE, MANGANESE TRIOXIDE, OXYGEN TRIFLUORIDE

INCOMPATIBILITY (MATERIAL TO AVOID):
CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS- SEE CONDITIONS TO AVOID

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:
SILICA WILL DISSOLVE IN HYDROCHLORIC ACID TO FORM A CORROSIVE GAS- SILICON TETRAFLUORIDE

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

Silicon dioxide: Inhalation and retention of respirable crystalline silica can cause silicosis in several forms, chronic, accelerated or acute. Acute silicosis can occur with exposures to high concentrations of respirable crystalline silica over a very short time period, the symptoms of acute silicosis include progressive shortness of breath, fever, cough, and weight loss. Acute silicosis can be fatal. IARC concluded that there was sufficient evidence in humans for the carcinogenicity of crystalline silica in the form of quartz (Group 1). Exposure to respirable crystalline silica can also be associated with autoimmune sisease, tuberculosis, kidney damage, non-malignant respiratory disease. For further information, thr NIOSH Hazard Review- Occupational Effects of Occupational Exposure to Respirable Crystaline Silica published in April of 2002 should be reiewed.

SECTION 12: ECOLOGICAL INFORMATION

Silicon Dioxide: There is no data that suggests that crystalline silica is toxic to birds, fish, invertebrates, microorganisms or plants.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:
DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: Not Regulated

IMO/IMDG **Not regulated**

SECTION 15: REGULATORY INFORMATION

Silicon Dioxide: risk phrases: R 48/20 Harmful – Danger of serious damage to health by prolonged exposure through inhalation. Safety Phrases: S 22 – Do not breathe dust and S 38 – In case of insufficient ventilation, wear suitable respiratory equipment

Crystaline Silica (Silicon Dioxide) is on the TSCA list. NTP list as a known human carcinogen, California proposition 65 list as a known carcinogen, Massachusetts Toxic Use Reduction Act list as toxic, Pennsylvania Worker and community right to know Act list as a hazardous substance.

Crystaline Silica (Silicon Dioxide) is on the Canada DSL – WHMIS Classification D2A
Crystaline Silica is on the Australian Inventory of Chemicals Substances list, Japan Ministy of International Trade and Industry list, Korea Existing Chemicals Inventory with registry number 9212-5667 and the Phillipines Inventory of Chemicals and Chemical Substances list.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available
See Section 1 for date of preparation