



SAFETY DATA SHEET

MATERIAL: Like Nu Manufacturing Acrylic Bonding Agent

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: LIKE NU MANUFACTURING ACRYLIC BONDING AGENT

SUPPLIER: LIKE-NU CONCRETE
26945 CABOT ROAD
SUITE 108
LAGUNA HILLS, CA 92653
WWW.LIKENUCONCRETE.COM

CONTACT: (949) 333-4230
INFO@LIKENUCONCRETE.COM

EMERGENCY: CALL AMBIPAR RESPONSE
1 (800) 633-8253

PRODUCT FORM: LIQUID

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

SKIN CORROSION/IRRITATION CATEGORY 1, 1A, 1B, 1C

SKIN IRRITATION CATEGORY 3

SENSITIZATION, SKIN CATEGORY 1, 1A, 1B

MAY BE HARMFUL IF INHALED CATEGORY 5

MAY CAUSE CANCER BY INHALATION CATEGORY 1,1A,1B

CAUSES SERIOUS EYE DAMAGE CATEGORY 1

RESPIRATORY IRRITATION CATEGORY 1,1A,1B, 3

H314: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE

H315: CAUSES SKIN IRRITATION

H317: MAY CAUSE AN ALLERGIC SKIN REACTION

H333: ACUTE TOXICITY, INHALATION CATEGORY 5

H350I: CARCINOGENICITY

H318: SERIOUS EYE DAMAGE/EYE IRRITATION

H334: SENSITIZATION, RESPIRATORY

H335: SPECIFIC TARGET ORGAN TOXICITY;
SINGLE EXPOSURE; RESPIRATORY TRACT
IRRITATION.

GHS LABEL ELEMENTS

HAZARD PICTOGRAMS



SIGNAL WORD

WARNING, DANGER

PRECAUTIONARY STATEMENTS

P203: OBTAIN, READ AND FOLLOW ALL SAFETY INSTRUCTIONS BEFORE USE.
 P262: DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING
 P263: AVOID CONTACT DURING PREGNANCY/WHILE NURSING
 P264: WASH HANDS AND CLOTHING THOROUGHLY AFTER HANDLING
 P265: DO NOT TOUCH EYES
 P271: USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
 P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION/HEARING PROTECTION
 P301+P316 IF SWALLOWED: GET EMERGENCY MEDICAL HELP IMMEDIATELY
 P302+ P350: IF ON SKIN: GENTLY WASH WITH PLENTY OF SOAP AND WATER
 P333+P313 IF SKIN IRRITATION OR RASH OCCURS GET MEDICAL ADVICE/ATTENTION
 P305+P351+P338 IF IN EYES; RISE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING
 P304+P340: IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE BREATHING.
 P342+P316: IF EXPERIENCING RESPIRATORY SYMPTOMS: GET EMERGENCY MEDICAL HELP IMMEDIATELY
 P363 WASH CONTAMINATED CLOTHING BEFORE REUSE
 P403+P233 STORE IN A WELL-VENTILATED PLACE, KEEP CONTAINER TIGHTLY CLOSED
 P402: STORE IN A DRY PLACE,
 P404: STORE IN A CLOSED CONTAINER

OTHER HAZARDS

INHALATION CAN CAUSE SERIOUS, POTENTIALLY IRREVERSIBLE LUNG/RESPIRATORY TRACT TISSUE DAMAGE DUE TO CHEMICAL (CAUSTIC) BURNS, INCLUDING THIRD DEGREE BURNS. INDIVIDUALS WITH LUNG DISEASE (E.G. BRONCHITIS, EMPHYSEMA, COPD, PULMONARY DISEASE) OR SENSITIVITY TO HEXAVALENT CHROMIUM CAN BE AGGRAVATED BY EXPOSURE.

PHYSICAL HAZARDS

LIKE NU MANUFACTURING ACRYLIC SEALER BINDER IS A LIQUID SOLUTION THAT MAY CAUSE IRRITATION TO THE RESPIRATORY IF INHALED. IT MAY ALSO CAUSE IRRITATION TO THE EYES, SKIN, AND MUCOUS MEMBRANES UPON CONTACT. PROLONGED OR REPEATED EXPOSURE MAY LEAD TO DERMATITIS OR RESPIRATORY SENSITIZATION.

HEALTH HAZARDS

INHALATION OF THE SEALER BINDER MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT, INCLUDING COUGHING, SNEEZING, AND SHORTNESS OF BREATH. EYE CONTACT WITH THE SOLUTION MAY CAUSE IRRITATION, REDNESS, AND DISCOMFORT. SKIN CONTACT MAY RESULT IN IRRITATION REDNESS, AND DERMATITIS. INGESTION OF THE SEALER BINDER IS UNLIKELY UNDER NORMAL CONDITIONS OF USE BUT MAY CAUSE GASTROINTESTINAL IRRITATION IF INGESTED.

SIGNAL WORD

WARNING, DANGER

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

NAME	CAS NUMBER	%
Vinyl Acetate	108-05-4	TRADE SECRET

SECTION 4: FIRST AID MEASURES

INHALATION

REMOVE AFFECTED PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN IF TRAINED TO DO SO. SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

SKIN CONTACT

WASH AFFECTED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

EYE CONTACT	FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES, HOLDING EYELIDS OPEN. SEEK MEDICAL ATTENTION IF IRRITATION OR REDNESS PERSISTS.
INGESTION	RINSE MOUTH WITH WATER. DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION IMMEDIATELY.
MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED	
SYMPTOMS/INJURIES	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE RESPIRATORY IRRITATION. SKIN SENSITIZATION. MAY CAUSE CANCER.
SYMPTOMS/INJURIES AFTER SKIN CONTACT MAY CAUSE CANCER.	

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA	USE WATER FOG, FOAM, DRY CHEMICAL, OR CARBON DIOXIDE (CO ₂) EXTINGUISHING MEDIA. AVOID DIRECT APPLICATION OF WATER TO HOT SURFACES OR SOLUTION.
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	
FIRE HAZARD	NON-FLAMMABLE
EXPLOSION HAZARD	PRODUCT IS NOT EXPLOSIVE
ADVICE FOR FIREFIGHTERS	
PRECAUTIONARY MEASURES FIRE	EXERCISE CAUTION WHEN FIGHTING ANY CHEMICAL FIRE.
FIREFIGHTING INSTRUCTIONS	USE WATER SPRAY OR FOG FOR COOLING EXPOSED CONTAINERS. DO NOT GET WATER INSIDE CONTAINERS. DO NOT APPLY WATER STREAM DIRECTLY AT SOURCE OF LEAK.
PROTECTION DURING FIREFIGHTING	DO NOT ENTER FIRE AREA WITHOUT PROPER PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY PROTECTION. HAZARDOUS COMBUSTION PRODUCTS: NONE.

SECTION 6: ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) INCLUDING GLOVES, GOGGLES, AND RESPIRATORY PROTECTION. USE ABSORBENT MATERIALS TO CONTAIN AND CLEAN UP SPILLS. AVOID INHALATION OF VAPORS OR MISTS.

ENVIRONMENTAL PRECAUTIONS

PREVENT ENTRY INTO WATERWAYS, SEWERS, OR SOIL. NOTIFY AUTHORITIES IF SPILL ENTERS WATERWAYS OR CONTAMINATES SOIL.

SECTION 7: HANDLING & STORAGE**HANDLING**

AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. USE IN WELL-VENTILATED AREAS. AVOID INHALATION OF VAPORS OR MISTS. WASH HANDS THOROUGHLY AFTER HANDLING.

STORAGE

STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**RESPIRATORY PROTECTION**

USE NIOSH-APPROVED RESPIRATORY PROTECTION IF VENTILATION IS INADEQUATE OR EXPOSURE LIMITS ARE EXCEEDED.

EYE PROTECTION

WEAR SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS TO PREVENT EYE CONTACT.

SKIN PROTECTION

WEAR CHEMICAL-RESISTANT GLOVES, CLOTHING, AND FOOTWEAR TO PREVENT SKIN CONTACT.

ENGINEERING CONTROLS

USE LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW EXPOSURE LIMITS.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	CLEAR LIQUID
ODOR	VARIABLE
PH	VARIABLE
MELTING POINT	NOT APPLICABLE
BOILING POINT	VARIABLE
FLASH POINT	NOT APPLICABLE
FLAMMABILITY	NON-FLAMMABLE
SOLUBILITY IN WATER	SOLUBLE
SPECIFIC GRAVITY	VARIABLE

SECTION 10: STABILITY AND REACTIVITY

STABILITY	STABLE UNDER NORMAL CONDITIONS OF USE AND STORAGE.
REACTIVITY	MAY REACT WITH INCOMPATIBLE MATERIALS. AVOID CONTACT WITH ACIDS, BASES, OXIDIZING AGENTS, AND REDUCING AGENTS.

SECTION 11: TOXICOLOGICAL INFORMATION**INFORMATION ON TOXICOLOGICAL EFFECTS**

ACUTE TOXICITY	ACUTE TOXICITY ESTIMATE ORAL - 2,900 MG/KG (CALCULATION METHOD) LD50 ORAL - RAT - 2,900 MG/KG REMARKS: (RTECS) SYMPTOMS: GASTROINTESTINAL DISTURBANCE, RISK OF ASPIRATION UPON VOMITING., PULMONARY FAILURE POSSIBLE AFTER ASPIRATION OF VOMIT. ACUTE TOXICITY ESTIMATE INHALATION - 4 H - 11.4 MG/L - VAPOR(CALCULATION METHOD) LC50 INHALATION - RAT - 4 H - 11.4 MG/L - VAPOR REMARKS: (RTECS) SYMPTOMS: MUCOSAL IRRITATIONS, COUGH, SHORTNESS OF BREATH, POSSIBLE DAMAGES:, DAMAGE OF RESPIRATORY TRACT LD50 DERMAL - RABBIT - MALE - 7,440 MG/KG REMARKS: (ECHA)
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SKIN CORROSION/IRRITATION

SKIN – RABBIT

RESULT: NO SKIN IRRITATION – 4 H

(OECD TEST GUIDELINE 404)

REMARKS: DRYING-OUT EFFECT RESULTING IN ROUGH AND CHAPPED SKIN.

POSSIBLE DAMAGES:

SLIGHT IRRITATION

SERIOUS EYE DAMAGE/EYE IRRITATION

EYES – RABBIT

RESULT: NO EYE IRRITATION

(OECD TEST GUIDELINE 405)

RESPIRATORY OR SKIN SENSITIZATION

LOCAL LYMPH NODE ASSAY (LLNA) – MOUSE

RESULT: NEGATIVE

(OECD TEST GUIDELINE 429)

GERM CELL MUTAGENICITY

TEST TYPE: AMES TEST

TEST SYSTEM: ESCHERICHIA COLI/SALMONELLA TYPHIMURIUM

METABOLIC ACTIVATION: WITH AND WITHOUT METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 471

RESULT: NEGATIVE

TEST TYPE: MUTAGENICITY (MAMMAL CELL TEST):

CHROMOSOME ABERRATION.

TEST SYSTEM: HUMAN LYMPHOCYTES

METABOLIC ACTIVATION: WITHOUT METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 473

RESULT: POSITIVE

TEST TYPE: MICRONUCLEUS TEST

TEST SYSTEM: HUMAN LYMPHOBLASTOID CELLS

METABOLIC ACTIVATION: WITHOUT METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 487

RESULT: NEGATIVE

TEST TYPE: IN VITRO MAMMALIAN CELL GENE MUTATION TEST

TEST SYSTEM: HUMAN LYMPHOBLASTOID CELLS

METABOLIC ACTIVATION: WITHOUT METABOLIC ACTIVATION

METHOD: OECD TEST GUIDELINE 490

RESULT: POSITIVE

TEST TYPE: GENOTOXICITY IN VIVO

SPECIES: MOUSE

CELL TYPE: SPERM

APPLICATION ROUTE: INTRAPERITONEAL

RESULT: NEGATIVE

REMARKS: (ECHA)

TEST TYPE: MICRONUCLEUS TEST

SPECIES: MOUSE

CELL TYPE: BONE MARROW

APPLICATION ROUTE: INTRAPERITONEAL
METHOD: OECD TEST GUIDELINE 474
RESULT: POSITIVE RESULTS WERE OBTAINED IN SOME IN VIVO TESTS.

CARCINOGENICITY

SUSPECTED OF CAUSING CANCER.
IARC: 2B - GROUP 2B: POSSIBLY CARCINOGENIC TO HUMANS (VINYL ACETATE)
NTP: NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.
OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA'S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY

NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN TOXICITY
- SINGLE EXPOSURE**

MAY CAUSE RESPIRATORY IRRITATION. - RESPIRATORY SYSTEM

**SPECIFIC TARGET ORGAN TOXICITY
- REPEATED EXPOSURE**

NO DATA AVAILABLE

ASPIRATION HAZARD

NO DATA AVAILABLE

ADDITIONAL INFORMATION

REPEATED DOSE TOXICITY - MOUSE - FEMALE - ORAL - 3 MONTHS - NOAEL (NO OBSERVED ADVERSE EFFECT LEVEL) - 281 MG/KG
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
AFTER UPTAKE:
SYSTEMIC EFFECTS:
DIZZINESS
SOMNOLENCE
UNCONSCIOUSNESS
ABSORPTION CAN RESULT IN DAMAGE TO:
LIVER
KIDNEY
EFFECT POTENTIATED BY: ETHANOL
THIS SUBSTANCE SHOULD BE HANDLED WITH PARTICULAR CARE.

SECTION 12: ECOLOGICAL INFORMATION**TOXICITY****TOXICITY TO DAPHNIA AND OTHER
AQUATIC INVERTEBRATES**

STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) - 12.6
MG/L - 48 H (OECD TEST GUIDELINE 202)

TOXICITY TO ALGAE

ERC50 - PSEUDOKIRCHNERIELLA SUBCAPITATA -
12.7 MG/L - 72 H (OECD TEST GUIDELINE 201)

TOXICITY TO FISH(CHRONIC TOXICITY)

FLOW-THROUGH TEST NOEC - PIMEPHALES PROMELAS
(FATHEAD MINNOW) - 0.55 MG/L - 34 D
(OECD TEST GUIDELINE 210)

PERSISTENCE AND DEGRADABILITY**BIODEGRADABILITY**

AEROBIC - EXPOSURE TIME 14 D RESULT: 82 - 98 % - READILY
BIODEGRADABLE. (OECD TEST GUIDELINE 301C)

BIOACCUMULATIVE POTENTIAL

NO DATA AVAILABLE

MOBILITY IN SOIL

NO DATA AVAILABLE

RESULTS OF PBT AND VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY
ASSESSMENT NOT REQUIRED/NOT CONDUCTED

ENDOCRINE DISRUPTING PROPERTIES

NO DATA AVAILABLE

OTHER ADVERSE EFFECTS

DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 13: DISPOSAL CONSIDERATIONS**WASTE DISPOSAL RECOMMENDATIONS**

DISPOSE OF LIKE NU MANUFACTURING ACRYLIC SEALER BINDER
IN ACCORDANCE WITH LOCAL REGULATIONS. DO NOT DISPOSE
OF SOLUTION IN WATERWAYS OR SEWERS.

ADDITIONAL INFORMATION

CONTAINER MAY REMAIN HAZARDOUS WHEN EMPTY. CONTINUE
TO OBSERVE ALL PRECAUTIONS.

WASTE MATERIALS

AVOID RELEASE TO THE ENVIRONMENT.

SECTION 14: TRANSPORT INFORMATION

LIKE NU MANUFACTURING ACRYLIC SEALER BINDER IS NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER DOT REGULATIONS.

SECTION 15: REGULATORY INFORMATION**POTENTIAL HEALTH EFFECTS**

EXPOSURE TO VINYL ACETATE CAN IRRITATE THE EYES, SKIN, AND RESPIRATORY TRACT, AND MAY HAVE POTENTIAL EFFECTS ON THE LIVER, NERVOUS SYSTEM, AND HEART.

AGENCIES LIKE ACGIH SET PERMISSIBLE EXPOSURE LIMITS (PELS) FOR AIRBORNE VINYL ACETATE CONCENTRATIONS IN THE WORKPLACE.

THE FDA ALLOWS VINYL ACETATE TO BE USED IN CERTAIN FOOD PACKAGING MATERIALS AS A COATING COMPONENT, WITH SPECIFIC LIMITATIONS ON THE AMOUNT THAT CAN MIGRATE INTO FOOD.

WHILE THE EPA HAS NOT CLASSIFIED VINYL ACETATE AS A DEFINITE CARCINOGEN, THE IARC LISTS IT AS "POSSIBLY CARCINOGENIC TO HUMANS".

PROPOSITION 65

WARNING: THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS INCLUDING [NAME OF CHEMICAL(S)], WHICH IS [ARE] KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION GO TO WWW.P65WARNINGS.CA.GOV

SECTION 16: MANUFACTURING AND OTHER INFORMATION**MANUFACTURER
ADDRESS**

LIKE NU MANUFACTURING
26945 CABOT ROAD
SUITE 108

**CONTACT
WEBSITE**

LAGUNA HILLS, CA 92653
INFO@LIKENUMATERIALS.COM
WWW.LIKENUCONCRETE.COM

DISCLAIMER

THIS MATERIAL SAFETY DATA SHEET (MSDS) IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF PRODUCT PERFORMANCE OR SAFETY. USERS SHOULD REFER TO THE PRODUCT LABEL AND TECHNICAL DATA SHEET FOR DETAILED INSTRUCTIONS ON SAFE HANDLING, USE, STORAGE, AND DISPOSAL OF LIKE NU MANUFACTURING ACRYLIC SEALER BINDER.

CREATION DATE

11-12-2024

REVISION DATE

11-21-2024

REVISION SUMMARY

THIS DOCUMENT HAS BEEN UPDATED TO REFLECT THE TOXICOLOGICAL INFORMATION AND REGULATORY INFORMATION



SAFETY DATA SHEET

MATERIAL: PART B

Portland Cement (ASTM Type I/II, ASTM Type III, ASTM Type V, ASTM C595 Type II, Masonry, Block, Plastic, Class G)

SECTION 1: PRODUCT IDENTIFICATION

1.1 PRODUCT IDENTIFIER

PRODUCT FORM: MIXTURE**PRODUCT NAME:** PORTLAND CEMENT (ASTM TYPE I/II, ASTM TYPE III, ASTM TYPE V, ASTM C595 TYPE II, MASONRY, BLOCK, PLASTIC, CLASS G)**SYNONYMS:** PORTLAND CEMENT; ALSO KNOWN AS CEMENT OR HYDRAULIC CEMENT

1.2 INTENDED USE OF THE PRODUCT

USE OF THE SUBSTANCE/MIXTURE: NO USE IS SPECIFIED.

1.3 NAME, ADDRESS, AND TELEPHONE OF THE RESPONSIBLE PARTY COMPANY

LIKE-NU CONCRETE INC
26945 CABOT ROAD
SUITE 108
LAGUNA HILLS, CA 92653 - UNITED STATES
T 949-333-4230
WWW.LIKENUCONCRETE.COM

1.4 EMERGENCY TELEPHONE NUMBER

CALL AMBIPAR RESPONSE: 1 (800) 633-8253

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

SKIN CORROSION/IRRITATION CATEGORY 1C

CAUSES SERIOUS EYE DAMAGE CATEGORY 1

SENSITIZATION, SKIN CATEGORY 1

MAY CAUSE CANCER BY INHALATION CATEGORY 1

RESPIRATORY IRRITATION CATEGORY 1, 1A, 1B, 3

H314: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE

H318: SERIOUS EYE DAMAGE/EYE IRRITATION

H317: MAY CAUSE AN ALLERGIC SKIN REACTION

H350I: CARCINOGENICITY

H334: SENSITIZATION, RESPIRATORY

H335: SPECIFIC TARGET ORGAN TOXICITY; SINGLE EXPOSURE; RESPIRATORY TRACT IRRITATION.

2.2 GHS LABEL ELEMENTS

HAZARD PICTOGRAMS



SIGNAL WORD

WARNING, DANGER

PRECAUTIONARY STATEMENTS

P201: OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
P202: DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.
P260: DO NOT BREATHE VAPORS, MIST, OR SPRAY.
P264: WASH HANDS AND CLOTHING THOROUGHLY AFTER HANDLING
P271: USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION/HEARING PROTECTION
P301+P330+P331 – IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING.
P303+P361+P353 – IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. BRUSH OFF, THEN RINSE SKIN WITH WATER/SHOWER.
P304+P340 – IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING.
P305+P351+P338 – IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.
P308+P313 – IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION.
P310 – IMMEDIATELY CALL A POISON CENTER OR DOCTOR.
P321 – SPECIFIC TREATMENT (SEE SECTION 4 ON THIS SDS).
P333+P313 – IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION.
P363 – WASH CONTAMINATED CLOTHING BEFORE REUSE.
P403+P233 – STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED.
P405 – STORE LOCKED UP.
P501 – DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS.

2.3 OTHER HAZARDS

INHALATION CAN CAUSE SERIOUS, POTENTIALLY IRREVERSIBLE LUNG/RESPIRATORY TRACT TISSUE DAMAGE DUE TO CHEMICAL (CAUSTIC) BURNS, INCLUDING THIRD DEGREE BURNS. INDIVIDUALS WITH LUNG DISEASE (E.G. BRONCHITIS, EMPHYSEMA, COPD, PULMONARY DISEASE) OR SENSITIVITY TO HEXAVALENT CHROMIUM CAN BE AGGRAVATED BY EXPOSURE.

2.4 UNKNOWN ACUTE TOXICITY(GHS-US) NO DATA AVAILABLE

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 SUBSTANCE**

NOT APPLICABLE

3.2 MIXTURE

NAME	CAS NUMBER	%	GHS-US CLASSIFICATION
Cement, portland, chemicals	(CAS-No.) 65997-15-1	69 - 95	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335
Limestone	(CAS-No.) 1317-65-3	< = 25	Not classified
Gypsum (Ca(SO ₄).2H ₂ O)	(CAS-No.) 13397-24-5	5 - 7	Not classified
Quartz (Crystalline Silica)	(CAS-No.) 14808-60-7	< = 0.3	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES**4.1. DESCRIPTION OF FIRST-AID MEASURES FIRST-AID MEASURES GENERAL:**

REMOVE AFFECTED PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN IF TRAINED TO DO SO. SEEK MEDICAL ATTENTION IF SYMPTOMS PERSIST.

FIRST-AID MEASURES AFTER INHALATION: WHEN SYMPTOMS OCCUR: GO INTO OPEN AIR AND VENTILATE SUSPECTED AREA. OBTAIN MEDICAL ATTENTION IF BREATHING DIFFICULTY PERSISTS. INHALATION OF GROSS AMOUNTS OF PORTLAND CEMENT REQUIRES IMMEDIATE MEDICAL.

FIRST-AID MEASURES AFTER SKIN CONTACT: REMOVE CONTAMINATED CLOTHING. BRUSH OFF, THEN IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 60 MINUTES. WASH CONTAMINATED CLOTHING BEFORE REUSE. GET IMMEDIATE MEDICAL ADVICE/ATTENTION.

FIRST-AID MEASURES AFTER EYE CONTACT: RINSE CAUTIOUSLY WITH WATER FOR AT LEAST 60 MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. GET IMMEDIATE MEDICAL ADVICE/ATTENTION.

FIRST-AID MEASURES AFTER INGESTION: RINSE MOUTH. DO NOT INDUCE VOMITING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED

SYMPTOMS/INJURIES

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE RESPIRATORY IRRITATION. SKIN SENSITIZATION. MAY CAUSE CANCER.

SYMPTOMS/INJURIES AFTER INHALATION:

THE THREE TYPES OF SILICOSIS INCLUDE: 1) SIMPLE CHRONIC SILICOSIS – WHICH RESULTS FROM LONGTERM EXPOSURE (MORE THAN 20 YEARS) TO LOW AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. NODULES OF CHRONIC INFLAMMATION AND SCARRING PROVOKED BY THE RESPIRABLE CRYSTALLINE SILICA FORM IN THE LUNGS AND CHEST LYMPH NODES. THIS DISEASE MAY FEATURE BREATHLESSNESS AND MAY RESEMBLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD); 2) ACCELERATED SILICOSIS – OCCURS AFTER EXPOSURE TO LARGER AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA OVER A SHORTER PERIOD OF TIME (5-15 YEARS); 3) ACUTE SILICOSIS – RESULTS FROM SHORT-TERM EXPOSURE TO VERY LARGE AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. THE LUNGS BECOME VERY INFLAMED AND MAY FILL WITH FLUID, CAUSING SEVERE SHORTNESS OF BREATH AND LOW BLOOD OXYGEN LEVELS. INFLAMMATION, SCARRING, AND SYMPTOMS PROGRESS FASTER IN ACCELERATED SILICOSIS THAN IN SIMPLE SILICOSIS. PROGRESSIVE MASSIVE FIBROSIS MAY OCCUR IN SIMPLE OR ACCELERATED SILICOSIS, BUT IS MORE COMMON IN THE ACCELERATED FORM. PROGRESSIVE MASSIVE FIBROSIS RESULTS FROM SEVERE SCARRING AND LEADS TO THE DESTRUCTION OF NORMAL LUNG STRUCTURES. SOME STUDIES SHOW THAT EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA (WITHOUT SILICOSIS) OR THAT THE DISEASE SILICOSIS MAY BE ASSOCIATED WITH THE INCREASED INCIDENCE OF SEVERAL AUTOIMMUNE DISORDERS SUCH AS SCLERODERMA (THICKENING OF THE SKIN), SYSTEMIC LUPUS ERYTHEMATOSUS, RHEUMATOID ARTHRITIS AND DISEASES AFFECTING THE KIDNEYS. SILICOSIS INCREASES THE RISK OF TUBERCULOSIS. SOME STUDIES SHOW AN INCREASED INCIDENCE OF CHRONIC KIDNEY DISEASE AND END-STAGE RENAL DISEASE IN WORKERS EXPOSED TO RESPIRABLE CRYSTALLINE SILICA.

SYMPTOMS/INJURIES AFTER SKIN CONTACT:	CEMENT MAY CAUSE DRY SKIN, DISCOMFORT, IRRITATION, SEVERE BURNS, AND DERMATITIS. EXPOSURE OF SUFFICIENT DURATION TO WET CEMENT, OR TO DRY CEMENT ON MOIST AREAS OF THE BODY, CAN CAUSE SERIOUS, POTENTIALLY IRREVERSIBLE DAMAGE TO SKIN, EYE, RESPIRATORY AND DIGESTIVE TRACTS DUE TO CHEMICAL (CAUSTIC) BURNS, INCLUDING THIRD DEGREE BURNS. A SKIN EXPOSURE MAY BE HAZARDOUS EVEN IF THERE IS NO PAIN OR DISCOMFORT. CEMENT IS CAPABLE OF CAUSING DERMATITIS BY IRRITATION AND ALLERGY. SKIN AFFECTED BY DERMATITIS MAY INCLUDE SYMPTOMS SUCH AS, REDNESS, ITCHING, RASH, SCALING, AND CRACKING. IRRITANT DERMATITIS IS CAUSED BY THE PHYSICAL PROPERTIES OF CEMENT INCLUDING ALKALINITY AND ABRASION. ALLERGIC CONTACT DERMATITIS IS CAUSED BY SENSITIZATION TO HEXAVALENT CHROMIUM (CHROMATE) PRESENT IN CEMENT. THE REACTION CAN RANGE FROM A MILD RASH TO SEVERE SKIN ULCERS. PERSONS ALREADY SENSITIZED MAY REACT TO THE FIRST CONTACT WITH CEMENT. OTHERS MAY DEVELOP ALLERGIC DERMATITIS AFTER YEARS OF REPEATED CONTACT WITH CEMENT.
SYMPTOMS/INJURIES AFTER EYE CONTACT:	AIRBORNE DUST MAY CAUSE IMMEDIATE OR DELAYED IRRITATION OR INFLAMMATION. EYE CONTACT WITH LARGE AMOUNTS OF CLINKER DUST, DRY CEMENT POWDER OR WITH WET CEMENT CAN CAUSE MODERATE EYE IRRITATION, CHEMICAL BURNS AND BLINDNESS. EYE EXPOSURES REQUIRE IMMEDIATE FIRST AID AND MEDICAL ATTENTION TO PREVENT SIGNIFICANT DAMAGE TO THE EYE.
SYMPTOMS/INJURIES AFTER INGESTION:	MAY CAUSE BURNS OR IRRITATION OF THE LININGS OF THE MOUTH, THROAT, AND GASTROINTESTINAL TRACT. CHRONIC SYMPTOMS: MAY CAUSE CANCER.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

IF EXPOSED OR CONCERNED, GET MEDICAL ADVICE AND ATTENTION. IF MEDICAL ADVICE IS NEEDED, HAVE PRODUCT CONTAINER OR LABEL AT HAND.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA:

USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

UNSUITABLE EXTINGUISHING MEDIA:

DO NOT USE A HEAVY WATER STREAM. USE OF HEAVY STREAM OF WATER MAY SPREAD FIRE.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

FIRE HAZARD:	PRODUCT IS NOT FLAMMABLE.
EXPLOSION HAZARD:	PRODUCT IS NOT EXPLOSIVE.
REACTIVITY:	WET CEMENT IS ALKALINE AND IS INCOMPATIBLE WITH ACIDS, AMMONIUM SALTS AND ALUMINUM METAL. CEMENT DISSOLVES IN HYDROFLUORIC ACID, PRODUCING CORROSIVE SILICON TETRAFLUORIDE GAS. CEMENT REACTS WITH WATER TO FORM SILICATES AND CALCIUM HYDROXIDE. SILICATES REACT WITH POWERFUL OXIDIZERS SUCH AS FLUORINE, BORON TRIFLUORIDE, CHLORINE TRIFLUORIDE, MANGANESE TRIFLUORIDE, AND OXYGEN DIFLUORIDE.

5.3. ADVICE FOR FIREFIGHTERS

PRECAUTIONARY MEASURES FIRE:	EXERCISE CAUTION WHEN FIGHTING ANY CHEMICAL FIRE.
FIREFIGHTING INSTRUCTIONS:	USE WATER SPRAY OR FOG FOR COOLING EXPOSED CONTAINERS. DO NOT GET WATER INSIDE CONTAINERS. DO NOT APPLY WATER STREAM DIRECTLY AT SOURCE OF LEAK.
PROTECTION DURING FIREFIGHTING:	DO NOT ENTER FIRE AREA WITHOUT PROPER PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY PROTECTION.
HAZARDOUS COMBUSTION PRODUCTS:	NONE.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

GENERAL MEASURES:	DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. DO NOT BREATHE DUST. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.
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6.1.1. FOR NON-EMERGENCY PERSONNEL

PROTECTIVE EQUIPMENT:	USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE).
EMERGENCY PROCEDURES:	EVACUATE UNNECESSARY PERSONNEL.

6.1.2. FOR EMERGENCY PERSONNEL

PROTECTIVE EQUIPMENT:	EQUIP CLEANUP CREW WITH PROPER PROTECTION.
EMERGENCY PROCEDURES:	UPON ARRIVAL AT THE SCENE, A FIRST RESPONDER IS EXPECTED TO RECOGNIZE THE PRESENCE OF DANGEROUS GOODS, PROTECT ONESELF AND THE PUBLIC, SECURE THE AREA, AND CALL FOR THE ASSISTANCE OF TRAINED PERSONNEL AS SOON AS CONDITIONS PERMIT.

6.2. ENVIRONMENTAL PRECAUTIONS

PREVENT ENTRY TO SEWERS AND PUBLIC WATERS.

6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

FOR CONTAINMENT:

AS AN IMMEDIATE PRECAUTIONARY MEASURE, ISOLATE SPILL OR LEAK AREA IN ALL DIRECTIONS. CONTAIN SOLID SPILLS WITH APPROPRIATE BARRIERS AND PREVENT MIGRATION AND ENTRY INTO SEWERS OR STREAMS.

METHODS FOR CLEANING UP:

THE THREE TYPES OF SILICOSIS INCLUDE: 1) SIMPLE CHRONIC SILICOSIS – WHICH RESULTS FROM LONGTERM EXPOSURE (MORE THAN 20 YEARS) TO LOW AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. NODULES OF CHRONIC INFLAMMATION AND SCARRING PROVOKED BY THE RESPIRABLE CRYSTALLINE SILICA FORM IN THE LUNGS AND CHEST LYMPH NODES. THIS DISEASE MAY FEATURE BREATHLESSNESS AND MAY RESEMBLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD); 2) ACCELERATED SILICOSIS – OCCURS AFTER EXPOSURE TO LARGER AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA OVER A SHORTER PERIOD OF TIME (5-15 YEARS); 3) ACUTE SILICOSIS – RESULTS FROM SHORT-TERM EXPOSURE TO VERY LARGE AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. THE LUNGS BECOME VERY INFLAMED AND MAY FILL WITH FLUID, CAUSING SEVERE SHORTNESS OF BREATH AND LOW BLOOD OXYGEN LEVELS. INFLAMMATION, SCARRING, AND SYMPTOMS PROGRESS FASTER IN ACCELERATED SILICOSIS THAN IN SIMPLE SILICOSIS. PROGRESSIVE MASSIVE FIBROSIS MAY OCCUR IN SIMPLE OR ACCELERATED SILICOSIS, BUT IS MORE COMMON IN THE ACCELERATED FORM. PROGRESSIVE MASSIVE FIBROSIS RESULTS FROM SEVERE SCARRING AND LEADS TO THE DESTRUCTION OF NORMAL LUNG STRUCTURES. SOME STUDIES SHOW THAT EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA (WITHOUT SILICOSIS) OR THAT THE DISEASE SILICOSIS MAY BE ASSOCIATED WITH THE INCREASED INCIDENCE OF SEVERAL AUTOIMMUNE DISORDERS SUCH AS SCLERODERMA (THICKENING OF THE SKIN), SYSTEMIC LUPUS ERYTHEMATOSUS, RHEUMATOID ARTHRITIS AND DISEASES AFFECTING THE KIDNEYS. SILICOSIS INCREASES THE RISK OF TUBERCULOSIS. SOME STUDIES SHOW AN INCREASED INCIDENCE OF CHRONIC KIDNEY DISEASE AND END-STAGE RENAL DISEASE IN WORKERS EXPOSED TO RESPIRABLE CRYSTALLINE SILICA.

6.4. REFERENCE TO OTHER SECTIONS

SEE SECTION 8 FOR EXPOSURE CONTROLS AND PERSONAL PROTECTION AND SECTION 13 FOR DISPOSAL CONSIDERATIONS.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

ADDITIONAL HAZARDS WHEN PROCESSED: KEEP BULK AND BAGGED CEMENT DRY UNTIL USED. STACK BAGGED MATERIAL IN A SECURE MANNER TO PREVENT FALLING. BAGGED CEMENT IS HEAVY AND POSES RISKS SUCH AS SPRAINS AND STRAINS TO THE BACK, ARMS, SHOULDERS AND LEGS DURING LIFTING AND MIXING. HANDLE WITH CARE AND USE APPROPRIATE CONTROL MEASURES. ENGULFMENT HAZARD. TO PREVENT BURIAL OR SUFFOCATION, DO NOT ENTER A CONFINED SPACE, SUCH AS A SILO, BIN, BULK TRUCK, OR OTHER STORAGE CONTAINER OR VESSEL THAT STORES OR CONTAINS CEMENT. CEMENT CAN BUILDUP OR ADHERE TO THE WALLS OF A CONFINED SPACE. THE CEMENT CAN RELEASE, COLLAPSE OR FALL UNEXPECTEDLY. PROPERLY GROUND ALL PNEUMATIC CONVEYANCE SYSTEMS. THE POTENTIAL EXISTS FOR STATIC BUILD-UP AND STATIC DISCHARGE WHEN MOVING CEMENT POWDERS THROUGH A PLASTIC, NON-CONDUCTIVE, OR NON-GROUNDED PNEUMATIC CONVEYANCE SYSTEM. THE STATIC DISCHARGE MAY RESULT IN DAMAGE TO EQUIPMENT AND INJURY TO WORKERS. CUTTING, CRUSHING OR GRINDING HARDENED CEMENT, CONCRETE OR OTHER CRYSTALLINE SILICABEARING MATERIALS WILL RELEASE RESPIRABLE CRYSTALLINE SILICA. USE ALL APPROPRIATE MEASURES OF DUST CONTROL OR SUPPRESSION, AND PERSONAL PROTECTIVE EQUIPMENT (PPE) DESCRIBED IN SECTION 8 BELOW.

PRECAUTIONS FOR SAFE HANDLING:

DO NOT BREATHE DUST. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. WASH HANDS AND OTHER EXPOSED AREAS WITH MILD SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING AND WHEN LEAVING WORK. AVOID CONTACT WITH EYES, SKIN AND MCLOTHING. HANDLE EMPTY CONTAINERS WITH CARE BECAUSE THEY MAY STILL PRESENT A HAZARD. OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. CUTTING, CRUSHING OR GRINDING HARDENED CEMENT, CONCRETE OR OTHER CRYSTALLINE SILICA-BEARING MATERIALS WILL RELEASE RESPIRABLE CRYSTALLINE SILICA. USE ALL APPROPRIATE MEASURES OF DUST CONTROL OR SUPPRESSION, AND PERSONAL PROTECTIVE EQUIPMENT (PPE) DESCRIBED IN SECTION 8 BELOW.

HYGIENE MEASURES:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PROCEDURES.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

STORAGE: PROTECT FROM MOISTURE. INCOMPATIBLE MATERIALS.
ACIDS. AMMONIUM SALTS. ALUMINUM. WATER. OXIDIZERS.
NONE

STORAGE: STORE IN A DRY PLACE. PROTECT FROM MOISTURE

INCOMPATIBLE MATERIALS: ACIDS. AMMONIUM SALTS. ALUMINUM. WATER. OXIDIZERS..

7.3. SPECIFIC END USE(S) NO USE IS SPECIFIED.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

FOR SUBSTANCES LISTED IN SECTION 3 THAT ARE NOT LISTED HERE, THERE ARE NO ESTABLISHED EXPOSURE LIMITS FROM THE MANUFACTURER, SUPPLIER, IMPORTER, OR THE APPROPRIATE ADVISORY AGENCY INCLUDING: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OR OSHA (PEL).

Cement, portland, chemicals (65997-15-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	5000 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Limestone (1317-65-3)		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Gypsum (Ca(SO₄).2H₂O) (13397-24-5)		
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable particulate matter)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³ (respirable dust)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
Silica, crystalline (general form) (Not Applicable)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	50 µg/m ³ (excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays)

8.2. EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS:	EMERGENCY EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE. USE LOCAL EXHAUST OR GENERAL DILUTION VENTILATION OR OTHER SUPPRESSION METHODS TO MAINTAIN DUST LEVELS BELOW EXPOSURE LIMITS. POWER EQUIPMENT SHOULD BE EQUIPPED WITH PROPER DUST COLLECTION DEVICES.
PERSONAL PROTECTIVE EQUIPMENT:	GLOVES. PROTECTIVE CLOTHING. PROTECTIVE GOGGLES. INSUFFICIENT VENTILATION: WEAR RESPIRATORY PROTECTION.
HAND PROTECTION:	WEAR GLOVES IMPERVIOUS TO WATER TO PREVENT SKIN CONTACT. DO NOT RELY ON BARRIER CREAMS, IN PLACE OF IMPERVIOUS GLOVES.
EYE AND FACE PROTECTION:	WEAR ANSI APPROVED GLASSES OR SAFETY GOGGLES WHEN HANDLING WET CONCRETE TO PREVENT CONTACT WITH EYES. WEARING CONTACT LENSES, WHEN USING CONCRETE, IS NOT RECOMMENDED. IN CASE OF EXCESSIVE DUST PRODUCTION, SAFETY GOGGLES ARE RECOMMENDED.
SKIN AND BODY PROTECTION:	WEAR GLOVES, BOOT COVERS AND PROTECTIVE CLOTHING IMPERVIOUS TO WATER TO PREVENT SKIN CONTACT. DO NOT RELY ON BARRIER CREAMS, IN PLACE OF IMPERVIOUS GLOVES.
RESPIRATORY PROTECTION:	IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION IS EXPERIENCED, APPROVED RESPIRATORY PROTECTION SHOULD BE WORN. IN CASE OF INADEQUATE VENTILATION, OXYGEN DEFICIENT ATMOSPHERE, OR WHERE EXPOSURE LEVELS ARE NOT KNOWN WEAR APPROVED RESPIRATORY PROTECTION.
OTHER INFORMATION:	WHEN USING, DO NOT EAT, DRINK OR SMOKE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE :	SOLID
APPEARANCE :	GRAY POWDER
ODOR :	NONE
ODOR THRESHOLD :	NO DATA AVAILABLE
PH :	12 – 13 (IN WATER)
EVAPORATION RATE :	NO DATA AVAILABLE

PHYSICAL STATE :	SOLID
FREEZING POINT :	NO DATA AVAILABLE
BOILING POINT :	NO DATA AVAILABLE
FLASH POINT :	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE :	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE :	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS) :	NO DATA AVAILABLE
VAPOR PRESSURE :	NO DATA AVAILABLE
RELATIVE VAPOR DENSITY AT 20°C :	NO DATA AVAILABLE
RELATIVE DENSITY :	NO DATA AVAILABLE
SPECIFIC GRAVITY :	3.15
SOLUBILITY :	SLIGHTLY SOLUBLE IN WATER.
PARTITION COEFFICIENT: N-OCTANOL/WATER :	NO DATA AVAILABLE
VISCOSITY :	NO DATA AVAILABLE

9.2. OTHER INFORMATION NO ADDITIONAL INFORMATION AVAILABLE

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:	WET CEMENT IS ALKALINE AND IS INCOMPATIBLE WITH ACIDS, AMMONIUM SALTS AND ALUMINUM METAL. CEMENT DISSOLVES IN HYDROFLUORIC ACID, PRODUCING CORROSIVE SILICON TETRAFLUORIDE GAS. CEMENT REACTS WITH WATER TO FORM SILICATES AND CALCIUM HYDROXIDE. SILICATES REACT WITH POWERFUL OXIDIZERS SUCH AS FLUORINE, BORON TRIFLUORIDE, CHLORINE TRIFLUORIDE, MANGANESE TRIFLUORIDE, AND OXYGEN DIFLUORIDE.
10.2. CHEMICAL STABILITY	10.2. CHEMICAL STABILITY: STABLE UNDER RECOMMENDED HANDLING AND STORAGE CONDITIONS (SEE SECTION 7).
10.3. POSSIBILITY OF HAZARDOUS REACTIONS:	10.3. POSSIBILITY OF HAZARDOUS REACTIONS: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.
10.4. CONDITIONS TO AVOID:	10.4. CONDITIONS TO AVOID: PROTECT FROM MOISTURE. INCOMPATIBLE MATERIALS.
10.5. INCOMPATIBLE MATERIALS:	10.5. INCOMPATIBLE MATERIALS: ACIDS. AMMONIUM SALTS. ALUMINUM. WATER. OXIDIZERS.
10.6. HAZARDOUS DECOMPOSITION PRODUCTS	NONE.

SECTION II: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: NONE.

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

SKIN CORROSION/IRRITATION: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
PH: 12 - 13 (IN WATER)
SERIOUS EYE DAMAGE/IRRITATION: CAUSES SERIOUS EYE DAMAGE.
PH: 12 - 13 (IN WATER)
RESPIRATORY OR SKIN SENSITIZATION: MAY CAUSE AN ALLERGIC SKIN REACTION.
GERM CELL MUTAGENICITY: NOT CLASSIFIED
CARCINOGENICITY: MAY CAUSE CANCER.

Quartz (14808-60-7)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Silica, crystalline (general form) (Not Applicable)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.

REPRODUCTIVE TOXICITY: NOT CLASSIFIED
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): MAY CAUSE RESPIRATORY IRRITATION.
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): NOT CLASSIFIED
ASPIRATION HAZARD: NOT CLASSIFIED

SYMPTOMS/INJURIES AFTER INHALATION: THE THREE TYPES OF SILICOSIS INCLUDE: 1) SIMPLE CHRONIC SILICOSIS – WHICH RESULTS FROM LONGTERM EXPOSURE (MORE THAN 20 YEARS) TO LOW AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. NODULES OF CHRONIC INFLAMMATION AND SCARRING PROVOKED BY THE RESPIRABLE CRYSTALLINE SILICA FORM IN THE LUNGS AND CHEST LYMPH NODES. THIS DISEASE MAY FEATURE BREATHLESSNESS AND MAY RESEMBLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD); 2) ACCELERATED SILICOSIS – OCCURS AFTER EXPOSURE TO LARGER AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA OVER A SHORTER PERIOD OF TIME (5-15 YEARS); 3) ACUTE SILICOSIS – RESULTS FROM SHORT-TERM EXPOSURE TO VERY LARGE AMOUNTS OF RESPIRABLE CRYSTALLINE SILICA. THE LUNGS BECOME VERY

INFLAMED AND MAY FILL WITH FLUID, CAUSING SEVERE SHORTNESS OF BREATH AND LOW BLOOD OXYGEN LEVELS. INFLAMMATION, SCARRING, AND SYMPTOMS PROGRESS FASTER IN ACCELERATED SILICOSIS THAN IN SIMPLE SILICOSIS. PROGRESSIVE MASSIVE FIBROSIS MAY OCCUR IN SIMPLE OR ACCELERATED SILICOSIS, BUT IS MORE COMMON IN THE ACCELERATED FORM. PROGRESSIVE MASSIVE FIBROSIS RESULTS FROM SEVERE SCARRING AND LEADS TO THE DESTRUCTION OF NORMAL LUNG STRUCTURES. SOME STUDIES SHOW THAT EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA (WITHOUT SILICOSIS) OR THAT THE DISEASE SILICOSIS MAY BE ASSOCIATED WITH THE INCREASED INCIDENCE OF SEVERAL AUTOIMMUNE DISORDERS SUCH AS SCLERODERMA (THICKENING OF THE SKIN), SYSTEMIC LUPUS ERYTHEMATOSUS, RHEUMATOID ARTHRITIS AND DISEASES AFFECTING THE KIDNEYS. SILICOSIS INCREASES THE RISK OF TUBERCULOSIS. SOME STUDIES SHOW AN INCREASED INCIDENCE OF CHRONIC KIDNEY DISEASE AND END-STAGE RENAL DISEASE IN WORKERS EXPOSED TO RESPIRABLE CRYSTALLINE SILICA.

SYMPTOMS/INJURIES AFTER SKIN CONTACT: CEMENT MAY CAUSE DRY SKIN, DISCOMFORT, IRRITATION, SEVERE BURNS, AND DERMATITIS. EXPOSURE OF SUFFICIENT DURATION TO WET CEMENT, OR TO DRY CEMENT ON MOIST AREAS OF THE BODY, CAN CAUSE SERIOUS, POTENTIALLY IRREVERSIBLE DAMAGE TO SKIN, EYE, RESPIRATORY AND DIGESTIVE TRACTS DUE TO CHEMICAL (CAUSTIC) BURNS, INCLUDING THIRD DEGREE BURNS. A SKIN EXPOSURE MAY BE HAZARDOUS EVEN IF THERE IS NO PAIN OR DISCOMFORT. CEMENT IS CAPABLE OF CAUSING DERMATITIS BY IRRITATION AND ALLERGY. SKIN AFFECTED BY DERMATITIS MAY INCLUDE SYMPTOMS SUCH AS, REDNESS, ITCHING, RASH, SCALING, AND CRACKING. IRRITANT DERMATITIS IS CAUSED BY THE PHYSICAL PROPERTIES OF CEMENT INCLUDING ALKALINITY AND ABRASION. ALLERGIC CONTACT DERMATITIS IS CAUSED BY SENSITIZATION TO HEXAVALENT CHROMIUM (CHROMATE) PRESENT IN CEMENT. THE REACTION CAN RANGE FROM A MILD RASH TO SEVERE SKIN ULCERS. PERSONS ALREADY SENSITIZED MAY REACT TO THE FIRST CONTACT WITH CEMENT. OTHERS MAY DEVELOP ALLERGIC DERMATITIS AFTER YEARS OF REPEATED CONTACT WITH CEMENT.

SYMPTOMS/INJURIES AFTER EYE CONTACT: AIRBORNE DUST MAY CAUSE IMMEDIATE OR DELAYED IRRITATION OR INFLAMMATION. EYE CONTACT WITH LARGE AMOUNTS OF CLINKER DUST, DRY CEMENT POWDER OR WITH WET CEMENT CAN CAUSE MODERATE EYE IRRITATION, CHEMICAL BURNS AND BLINDNESS. EYE EXPOSURES REQUIRE IMMEDIATE FIRST AID AND MEDICAL ATTENTION TO PREVENT SIGNIFICANT DAMAGE TO THE EYE.

CHRONIC SYMPTOMS: MAY CAUSE CANCER.

SECTION 12: ECOLOGICAL INFORMATION**12.1. TOXICITY****ECOLOGY - GENERAL:**

NOT CLASSIFIED.

12.2. PERSISTENCE AND DEGRADABILITY

Portland Cement (ASTM Type I/II, ASTM Type III, ASTM Type V, ASTM C595 Type II, Masonry, Block, Plastic, Class G)	
Persistence and Degradability	Not established.

12.3. BIOACCUMULATIVE POTENTIAL

Portland Cement (ASTM Type I/II, ASTM Type III, ASTM Type V, ASTM C595 Type II, Masonry, Block, Plastic, Class G)	
Bioaccumulative Potential	Not established.

12.4. MOBILITY IN SOIL

NO ADDITIONAL INFORMATION AVAILABLE

12.5. OTHER ADVERSE EFFECTS**OTHER INFORMATION :**

AVOID RELEASE TO THE ENVIRONMENT.

SECTION 13 : DISPOSAL CONSIDERATIONS**13.1. WASTE TREATMENT METHODS****WASTE DISPOSAL RECOMMENDATIONS:**

DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS.

ADDITIONAL INFORMATION:

CONTAINER MAY REMAIN HAZARDOUS WHEN EMPTY.
CONTINUE TO OBSERVE ALL PRECAUTIONS.

ECOLOGY - WASTE MATERIALS:

AVOID RELEASE TO THE ENVIRONMENT.

SECTION 14: TRANSPORT INFORMATION

THE SHIPPING DESCRIPTION(S) STATED HEREIN WERE PREPARED IN ACCORDANCE WITH CERTAIN ASSUMPTIONS AT THE TIME THE SDS WAS AUTHORED, AND CAN VARY BASED ON A NUMBER OF VARIABLES THAT MAY OR MAY NOT HAVE BEEN KNOWN AT THE TIME THE SDS WAS ISSUED.

14.1. IN ACCORDANCE WITH DOT
14.2. IN ACCORDANCE WITH IMDG
14.3. IN ACCORDANCE WITH IATA

NOT REGULATED FOR TRANSPORT
 NOT REGULATED FOR TRANSPORT
 NOT REGULATED FOR TRANSPORT

SECTION 15: REGULATORY INFORMATION

Portland Cement (ASTM Type I/II, ASTM Type III, ASTM Type V, ASTM C595 Type IL, Masonry, Block, Plastic, Class G)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Cement, portland, chemicals (65997-15-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Limestone (1317-65-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US STATE REGULATIONS

WARNING: THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS, INCLUDING SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE), WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER; AND CHROMIUM (HEXAVALENT COMPOUNDS), WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION, GO TO WWW.P65WARNINGS.CA.GOV.

Cement, portland, chemicals (65997-15-1)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Limestone (1317-65-3)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Gypsum (Ca(SO₄).2H₂O) (13397-24-5)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
Quartz (14808-60-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**MANUFACTURER
ADDRESS**

LIKE NU MANUFACTURING
26945 CABOT ROAD
SUITE 108
LAGUNA HILLS, CA 92653
INFO@LIKENUMATERIALS.COM
WWW.LIKENUCONCRETE.COM

**CONTACT
WEBSITE****DISCLAIMER**

THIS MATERIAL SAFETY DATA SHEET (MSDS) IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF PRODUCT PERFORMANCE OR SAFETY. USERS SHOULD REFER TO THE PRODUCT LABEL AND TECHNICAL DATA SHEET FOR DETAILED INSTRUCTIONS ON SAFE HANDLING, USE, STORAGE, AND DISPOSAL OF LIKE NU MANUFACTURING ACRYLIC SEALER BINDER.

CREATION DATE

11-12-2024

REVISION DATE

11-21-2024

REVISION SUMMARY

THIS DOCUMENT HAS BEEN UPDATED TO REFLECT THE MIXTURE SUMMARY

GHS FULL TEXT PHRASES

Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.