NAME OF PRODUCT

RITE WALL GUNITE/SEAL MIX

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RITECRETE GUNITE MIX

SYNONYMS:

PRODUCT CODES: 80SM4060,60SM3070

MANUFACTURER: RITE-CRETE CONCRETE PRODUCTS

DIVISION: WOODRUFF SUPPLY CO., INC

ADDRESS: 40 HICKLIN RD MADISONVILLE KY 42431

EMERGENCY PHONE: 270-821-6758

CHEMTREC PHONE:

OTHER CALLS:

FAX PHONE: 270-821-9065

CHEMICAL NAME: CEMENT

CHEMICAL FAMILY:

CHEMICAL FORMULA: CEMENT.SAND

PRODUCT USE: MINE SEALANT SPRAYABLE

PREPARED BY: LARRY DUGGER

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: CEMENT SAND

<u>CAS NO.</u> <u>% WT</u> <u>% VOL</u> <u>SARA 313 REPORTABLE</u>

FILE NO.:

MSDS DATE: 09/11/14

<u>ppm</u> <u>mg/m3</u> 49.0-71.0 10

OSHA PEL-TWA: 49.0-71.0 1
OSHA PEL STEL :

OSHA PEL CEILING: 50

ACGIH TLV-TWA: 10

ACGIH TLV STEL: ACGIH TLV CEILING:

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: PORTLAND CEMENT IS A LIGH GREY POWDER THAT POSES LITTLE IMMEDIATE HAZARD. A SINGLE SHORT TERM EXPOSURE TO THE POWDER IS NOT LIKELY TO CAUSE SEROIUS HARM HOWEVER EXPOSURE OF SUFFICIENT DURATION TO WET PORTLAND CEMENT CAN CAUSE SERIOUS, POTENETILLY IRREVERSIBLE TISSUE (SKIN OR EYE) DESTRUCTION IN FORM OF CHEMICAL (CAUSTIC) BURNS. THE SAME TYPE OF TISSUE DESTRUCTION CAN OCCUR IF WET OR MOIST AREAS OF THE BODY ARE EXPOSED FOR SUFFICIENT DURATION TO DRY PORTLAND CEMENT.

ROUTES OF ENTRY: EYE CONTACT, SKIN CONTACT, INHALATION, AND INGESTION

POTENTIAL HEALTH EFFECTS

EYES: EXPOSURE TO AIRBORNE DUST MAY CAUSE IMMEDIATE OR DELAYED IRRITATION OR INFLAMMATION. EYE CONTACT BY LARGE AMOUNTS OF DRY POWDER OR SPLASHS OF WET PORTLAND CEMENT MAY CAUSE EFFECTS RANGING FROM MODERATE EYE IRRATATION TO CHEMICAL BURNS OR BLINDNESS. Such exposures require immediate first aid (see section) and medical attention to prevent significant damage to the eye

SKIN: DISCOMFORT OR PAIN CANNOT BE RELIED UPON TO ALERT A PERSON TO HAZARDOUS SKIN EXPOSURE. CONSEQUENTLY THE ONLY EFFECTIVE MEANS OF AVOIDING SKIN INJURY OR ILLNESS INVOLE MINIMIZING SKIN CONTACT, PARTICULALY WITH WET CEMENT. EXPOSED PERSONS MAY NOT FEEL DISCOMFORT UNTIL HOURS AFTER THE EXPOSURE HAS ENDED AND SIGNIFICANT INJURY HAS OCCURRED.

DRY PORTLAND CEMENT CONTACTING WET SKIN OR EXPOSURE TO MOIST OR WET PORTLAND CEMENT MAY CAUSE MORE SEVERE SKIN EFFECTS INCLUDING THICKENING ,CRACKING, OR FISSURING OF THE SKIN. PROLONGED EXPOSURE CAN CAUSE SEVERE SKIN DAMAGE IN THE FORM OF (ALKALI) CHEMICAL BURNS

SOME INDIVIDUALS MAY EXHIBIT AN ALLERGIC RESPONSE UPON EXPOSURE TO PORTLAND CEMENT, POSSIBLY DUE TO TRACE ELEMANTS OF CHROMIUM. THE RESPONSE MAY APPEAR IN A VARIETY OF FORMS RANGING FROM A MILD RASH TO

NAME OF PRODUCT

RITECRETE GUNITE MIX

SEVERE SKIN ULCERS, PERSONS ALREADY SENSITIZED MAY REACT TO THEIR FIRST CONTACT WITH THE PRODUCT. OTHER PERSONS MAY FIRST EXPERIENCE THIS EFFECT AFTER YEARS OF CONTACT WITH PORTLAND CEMENT PRODUCTS.

INGESTION: ALTHOUGH SMALL QUANTITES OF DUST ARE NOT KNOWN TO BE HARMFUL, ILL EFFECTS ARE POSSIBLE IF LARGER QUANTITES ORE CONSUMED. PORTLAND CEMENT SHOULD NOT BE EATEN.

INHALATION: PORTLAND CEMENT MAY CONTAIN TRACE AMOUNTS OF FREE CRYSTALLINE SILICA. PROLONGED EXPOSURE TO RESIRABLE FREE SILICA CAN AGGRAVATE OTHER LUNG CONDITIONS AND CAUSE SILICOSIS. A DISABLING AND POTENTIALLY FATAL LUNG DISEASE. EXPOSURE TO MASONRY CEMENT MAY CAUSE IRRATATION TO THE MOIST MUCOUS MEMBEANRES OF THE NOSE.THROAT AND UPPER RESPIRATORY SYSTEM. It may also leave unpleasant deposits in the nose.

ACUTE HEALTH HAZARDS:

CHRONIC HEALTH HAZARDS:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: PRE-EXISTING UPPER RESPIRATORY AND LUNG DISEASES. UNUSUAL (HYPER) SENSITIVITY TO HEXAVALENT CHROMIUM(CHROMIUM+6) SALTS

CARCINOGENICITY

OSHA: ACGIH: NTP: IARC:

OTHER:

SECTION 3 NOTES: PORTLAND CEMENT IS NOT LISTED AS A CARCINOGEN.

SECTION 4: FIRST AID MEASURES

EYES: IMMEDIATELY FLUSH EYES THROUGHLY WITH WATER. CONTINUE FLUSHING EYES FOR AT LEAST 15 MINUTES, INCLUDING UNDER LIDSM TO REMOVE ALL PARTICLES. CALL PHYSICIAN IMMEDIATELY.

SKIN: WASH SKIN WITH COOL WATER AND PH-NEUTRAL SOAP OR MILD DETERGENT. SEEK MEDICAL TREATMENT IN ALL CASES OF PROLINGED EXPOSURE TO WET CEMENT, CEMENT MIXTURES, LIQUIDS FROM FRESH CEMENT PRODUCTS, OR PROLONGED WET SKIN EXPOSURE TO DRY CEMENT.

INGESTION: DO NOT INDUSE VOMITING. IF CONSCIOUS HAVE VICTIM DRINK PLENTY OF WATER AND CALL A PHYSICIAN IMMEDIATELY.

INHALATION: REMOVE TO FRESH AIR. SEEK

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: NONE

(% BY VOLUME) LOWER:

FLASH POINT: NONE

F: C:

METHOD USED: NONE

AUTOIGNITION TEMPERATURE: NOT COMBUSTIBLE

F: C:

NFPA HAZARD CLASSIFICATION

HEALTH: FLAMMABILITY: REACTIVITY: OTHER: NONE NONE

PAGE 2 OF 6

FILE NO.:

MSDS DATE: 09/11/14

NAME OF PRODUCT
RITECRETE GUNITE MIX
HMIS HAZARD CLASSIFICATION NONE
HEALTH: FLAMMARII

HEALTH: FLAMMABILITY: REACTIVITY: PROTECTION: NONE NONE

EXTINGUISHING MEDIA: NONE

SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUA FIRE AND EXPLOSION HAZARDS: NONE
HAZARDOUS DECOMPOSITION PRODUCTS: NONE

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: WEAR APPROPRIATE PROTECTIVE EQUIPMENT

SECTION 6 NOTES: COLLECT MATERIAL USING A SCOOP. AVOID ACTIONS THAT CAUSE DUST TO BECOME AIRBORNE. AVOID INHALATION OF DUST AND CONTACT WITH SKIN.

SCRAPE UP WET MATERIAL AND PLACE IN AN APPROPRIATER CONTAINER. ALLOW MATERIAL TO DRY BEFORE DISPOSAL. DON NOT ATTEMPT TO WASH PORTLAND CEMENT DOWN DRAINS.

DISPOSE OF WASTE MATERIAL ACCORDING TO LOCAL STATE AND FEDERAL REGS

FILE NO.:

MSDS DATE: 09/11/14

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: KEEP PORTLAND CEMENT DRY UNTIL USED. NORMAL TEMPERATURES AND PRESSURES DO NOT AFFECT THE MATERIAL.

OTHER PRECAUTIONS:

PROMPTLY REMOVE DUSTY CLOTHING OR CLOTHING WHICH IS WET WITH CEMENT FLUIDS AND LAUNDER BEFORE REUSE. WASH THROUGHLY AFTER EXPOSURE TO DUST OR WET CEMENT MIXTURES OR FLUIDS

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION: USE LOCAL EXHAIST OR GENERAL DILUTION VENTILATION TO CONTROL EXPOSURE WITHIN APPPLICABLE LIMITS.

RESPIRATORY PROTECTION: AVOID ACTIONS THAT CAUSE DUST TO BECOME AIRBORNE. USE LOCAL OR GENERAL EXHAUST VENTILATION TO CONTROL EXPOSURES BELOW APPLICABLE EXPOSURE LIMITS USE NIOSH/MSHA APPROVED (UNDER 30 CFR 11) OR NIOSH APPROVED (UNDER 42 CFR 84) RESPIRATORS IN POORLY VENTILATED AREAS, IF AN APPLICABLE EXPOSURE LIMIT IS EXCEEDED, OR WHEN DUST CAUSES DISCOMFORT OD IRRITATION.

EYE PROTECTION: WHERE POTENTIALLY SUBJECT TO SPLASHES OR PUFFS OF CEMENT, WEAR SAFRTY GLASSES WITH SIDE SHIELDS OR GOGGLES. IN EXTREMELY DUSTY ENVIROMENTS AND UNPREDICTABLE ENVIROMENTS, WEAR UNVENTED OR INDIRECTLY VENTED GOGGLES TO AVOID EYE IRRIATION OR INJURY. CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH MASONRY CEMENT OR FRESH CEMENT PRODUCTS.

SKIN PROTECTION: PREVENTION IS ESSENTIAL TO AVOIDING POTENTIALLY SEVERE SKIN INJURY. AVOID CONTACT WITH UNHARDENED PORTLAND CEMENT. IF CONTACT, OCCURS, PROMPTLY WASH AFFECTED AREA WITH SOAP AND WATER. WHERE PROLONGED EXPOSURE TO UNHARDENED PORTLAND CEMENT PRODUCTS MIGHT OCCUR, WEAR IMPERVIOUS CLOTHING AND GLOVES TO ELIMINATE SKIN CONTACT. WEAR STURDY BOOTS THAT ARE IMPERVIOUS TO WATER TO ELIMINATE FOOT AND ANKLE EXPOSURE.

DO NOT RELY ON BARRIER CREAMS- BARRIER CREAMS SHOULD NOT BE USED IN PLACE OF GLOVES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

FILE NO.:

MSDS DATE: 09/11/14

NAME OF PRODUCT RITECRETE GUNITE MIX WORK HYGIENIC PRACTICES:

EXPOSURE GUIDELINES:

SECTION 8 NOTES:

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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APPEARANCE: GREY POWDER

ODOR: NO DISTINCT ODOR

PHYSICAL STATE: SOLID (POWDER)

pH AS SUPPLIED: 12 TO 13

pH (Other):

BOILING POINT: NOT APPLICABLE

F: C:

MELTING POINT: NOT APPLICABLE

F:

FREEZING POINT: NOT APPLICABLE

F:

C

VAPOR PRESSURE (mmHg): NOT APPLICABLE

@

F:

VAPOR DENSITY (AIR = 1): NOT APPLICABLE

@

F:

SPECIFIC GRAVITY (H2O = 1): (H20=1.0) 2.87-3.00

@

F:

C:

EVAPORATION RATE: NOT APPLICABLE

BASIS (=1):

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: SLIGHTLY SOLUBLE (0.1 TO 1.0%)

PERCENT SOLIDS BY WEIGHT: NOT APPLICABLE

PERCENT VOLATILE: NOR APPLICABLE

BY WT/ BY VOL @ F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC):

WITH WATER: LBS/GAL WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT:

VISCOSITY:

F: C:

,

SECTION 9 NOTES:

NAME OF PRODUCT RITECRETE GUNITE MIX

SECTION 10: STABILITY AND REACTIVITY

UNSTABLE

FILE NO.:

MSDS DATE: 09/11/14

STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): UNTENTIONAL CONTACT WITH WATER

STABLE

INCOMPATIBILITY (MATERIAL TO AVOID): WET PORTLAND CEMENT IS ALKALINE. AS SUCH IT IS INCOMPATIBLE WITH ACIDS, AMMONIUM SALTS, AND PHOSPHOROUS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: WILL NOT SPONTANEOUSLY OCCUR. ADDING WATER PRODUCES (CAUSTIC)

CALCIUM HYDROXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID (POLYMERIZATION):

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: NO RECOGNIZED UNUSUAL TOXICITY TO PLANTS OR ANIMALS.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: DISPOSE OF WASTE MATERIAL ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

RCRA HAZARD CLASS:

SECTION 13: DISPOSAL CONSIDERATIONS (con't)

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENT:

WATER TRANSPORTATION

PROPER SHIPPING NAME:

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENTS:

PAGE 5 OF 6

NAME OF PRODUCT RITECRETE GUNITE MIX

AIR TRANSPORTATION
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): SOME SUBSTANCES IN PORTLAND CEMENT ARE ON THE TSCA INVENTORY LIST.

FILE NO.:

MSDS DATE: 09/11/14

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): NOT LISTED

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): PORTLAND CEMENT QUALIFIES AS A "HAZARDOUS SUBSTANCE" WITH DELAYED HEALTH EFFECTS.

311/312 HAZARD CATEGORIES:

313 REPORTABLE INGREDIENT: NOT SUBJECT TO REPORTING REQUIREMENTS

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER: Portland cement should only be used by knowledgeable persons. A key to using the product safely requires the user to recognize that portland cement chemically reacts with water, and that some of the intermediate products of this reaction (that is those while a portland cement product is "setting") pose a more severe hazard than does dry portland cement itself. While the information provide in this MSDS is believed to provide a useful summary of the hazards of portland cement as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product.

SELLERS MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY RITE-CRETE. Except that the product shall conform to the contracted specifications. The information provided here in was believed by Rite-Crete to be accurate at then time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of the product to determine the suitability of the product for its intended use. Buyers exclusive remedy shall be for damages and no claim of any kind, whether as to product otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyers Claim s based on contract, breach of warranty, negligence, or otherwise.

In particular, the data furnished in this sheet does not address hazards that may be posed by other materials mixed with portland cement to produce portland cement products. Users should review other relevant MSDS before working with the portland cement or working on portland cement products, for example, Portland cement concrete.