



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 278 KLEAR KRETE**

SDS DATE: 01/04/2019

SUPPLIER: Mid-American Research Chemical Corp. ADDRESS: P. O. Box 927 Columbus, NE 68602-0927
PHONE: 402-564-7104 FAX: 402-563-1290
EMERGENCY PHONE: InfoTrac 1-800-535-5053
E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Concrete sealer and curing compound.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Flammable liquid category 3, acute inhalation toxicity category 4, skin irritation category 2, serious eye irritation category 2A, carcinogenicity-inhalation category 2, specific target organ toxicity single exposure to respiratory tract category 3, specific target organ toxicity repeat exposure to ears category 2, aspiration hazard category 1.



SIGNAL WORD AND HAZARD AND PRECAUTIONARY STATEMENTS - DANGER: Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Harmful if in contact with skin or if inhaled. Causes skin and eye irritation. May cause damage to organs through prolonged or repeated exposure. Do not use until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as required. Store locked up in a cool, well-ventilated area. Dispose of in an approved waste disposal plant. In case of fire, use dry sand, dry chemical or alcohol-resistant foam for extinguishing. FIRST AID: Move out of dangerous area. If swallowed, immediately call a poison center or physician. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If unconscious, immediately take victim to a hospital. Show the safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours after exposure. If on skin, wash well with water. Remove contaminated clothing. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Keep eyes wide open while flushing. If eye irritation persists, consult a specialist. If inhaled, remove victim to fresh air and keep in a position comfortable for breathing. **KEEP OUT OF REACH OF CHILDREN!**

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>TLV</u>	<u>%</u>
Xylene, all isomers	1330-20-7	100 ppm	70-90
Ethylbenzene	100-41-4	100 ppm	5-15
Acrylic Resin	N/A	N/A	15-25

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush eyes with large quantities of water for 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Check for and remove contact lenses. If contact lenses cannot be removed, seek immediate medical attention. DO NOT give eye ointment. Seek medical attention.

SKIN: Remove contaminated shoes and clothing. Flush exposed area with plenty of water for 15 minutes. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.

INGESTION: **DO NOT INDUCE VOMITING.** If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.

INHALATION: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

NOTES TO PHYSICIANS: INHALATION: Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required. This material (or a component) sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

INGESTION: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: **SMALL FIRE:** Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces. **LARGE FIRE:** Use foam, water fog, or water spray. Water may be ineffective. Water may not extinguish the fire. Water fog and spray are effective in cooling containers and adjacent structures. However, water can be used to cool the external walls of vessels to prevent excessive pressure, auto ignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. A vapor and air mixture can create an explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons, aldehydes and other products of incomplete combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Hazards Identification on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

EMERGENCY PROCEDURES: **Flammable Liquid!** Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can be done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent spilled material from entering waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

LARGE SPILLS: Secure the area and control access. Prevent spilled material from entering sewers, storm drains, other drainage systems, and natural waterways. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all applicable local, state and federal laws and regulations.



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

PROTECTIVE EQUIPMENT: Use personal protective devices as stated in Section 8.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as emergency procedures. Dispose as hazardous waste in accordance with EPA RCRA.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING: A spill or leak can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Do NOT breathe vapor. Use only with adequate ventilation and personal protection. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do NOT take internally.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use gloves constructed of imperious materials and protective clothing if direct contact is anticipated. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Non-equilibrium conditions may increase the fire hazard associated with this product. A static electrical charge can accumulate when this material is flowing through pipes, nozzles or filters and when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather conditions. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. Carefully review operations that may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigation efforts, including bonding and grounding. Always keep nozzle in contact with the container throughout the loading process.

Do NOT fill any portable container in or on a vehicle. Do NOT use compressed air for filling, discharging or other handling operations. Product container is NOT designed for elevated pressure. Do NOT pressurize, cut, weld, braze solder, drill, or grind on containers. Do NOT expose product containers to flames, sparks, heat or other potential ignition sources. Empty containers may contain material residues which can ignite with explosive force. Observe label precautions.

OTHER PRECAUTIONS: Keep away from heat, sparks, or open flame. For Industrial and Institutional use only. For use by trained personnel only. KEEP AWAY FROM CHILDREN.

STORAGE: Keep container closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do NOT store with oxidizing agents. Do NOT store at elevated temperatures or in direct sunlight. Protect containers against physical damage. Head spaces in tanks and other containers may contain a mixture of air and vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes. Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA 77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, ("Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents").

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>TLV</u>
Xylene, all isomers	1330-20-7	100 ppm
Ethylbenzene	100-41-4	100 ppm
Acrylic Resin	N/A	N/A

ENGINEERING CONTROLS: Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should comply with the National Electrical Code. An emergency eye wash station and safety shower should be located near the work-station.



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

VENTILATION : Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

RESPIRATORY PROTECTION: For known vapor concentrations above the occupational exposure guidelines, use NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For airborne vapor concentrations that exceed the recommended protection factors for organic vapor respirators, use a full-face, positive-pressure, supplied air respirator. Due to fire and explosion hazards, do not enter atmospheres containing concentrations greater than 10% of the lower flammable limit of this product.

EYE PROTECTION: Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.

SKIN PROTECTION/PROTECTIVE GLOVES: Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton®. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods.

WORK HYGIENIC PRACTICES: Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-	
PHYSICAL STATE/COLOR:	Transparent, colorless liquid.
ODOR:	Sweet, pungent aromatic hydrocarbon.
SOLUBILITY IN WATER:	Very slightly soluble in cold water. (<0.1% w/w)
SPECIFIC GRAVITY:	0.91
MELTING/FREEZING POINT:	-48° to -25°C (-54° to -13°F)
BOILING POINT:	138° - 142°C (280°-288°F)
pH:	N/A
FLASH POINT/METHOD USED:	Closed cup: 27°C (81 F°).
EVAPORATION RATE:	N/A
FLAMMABILITY LIMITS:	N/A
VAPOR PRESSURE (mmHg):	0.9 kPa (7mm Hg) at 20°C
VAPOR DENSITY (AIR = 1):	3.70 (Air = 1)
PARTITION COEFFICIENT, n-OCTANOL/WATER:	N/A
AUTO-IGNITION TEMPERATURE:	N/A
DECOMPOSITION TEMPERATURE:	N/A
VISCOSITY: (cSt @ 40°C)	N/A

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: None

STABILITY: Stable

CONDITIONS TO AVOID: Keep away from heat, flame and other potential ignition sources. Keep away from strong oxidizing conditions and agents.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, alkalis, and oxidizers such as liquid chlorine, hydrogen peroxide, and oxygen.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS. (Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons, aldehydes and other products of incomplete combustion.)

HAZARDOUS POLYMERIZATION: No

CONDITIONS TO AVOID (POLYMERIZATION): None known.



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

SECTION 11: TOXICOLOGICAL INFORMATION

EYES: May cause eye irritation, with tearing, redness, or a stinging or burning feeling. Further, it can cause swelling of the eyes with blurred vision. Effects may become more serious with repeated or prolonged contact.

SKIN: May cause mild skin irritation with redness and/or an itching or burning feeling. Effects may become more serious with repeated or prolonged contact. It is likely that some components of this material are able to pass into the body through the skin and may cause similar effects as from breathing or swallowing it.

INGESTION: Swallowing this material may be harmful. May cause stomach or intestinal upset with pain, nausea, and/or diarrhea. Material can get into the lungs during swallowing or vomiting. Small amounts in the lungs can cause lung damage, possibly leading to chronic lung dysfunction or death. Swallowing this material may cause effects similar to those described in the inhalation section (see "INHALATION" below).

INHALATION: Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness, or unconsciousness. Breathing high concentrations of this material, for example, in an enclosed space or by intentional abuse, can cause irregular heartbeats which can cause death.

ACUTE HEALTH HAZARDS: None known.

CHRONIC HEALTH HAZARDS: Prolonged and/or repeated contact may cause skin irritation and inflammation. Symptoms include defatting, redness, blistering, lesions, and scaly dermatitis.

Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

Reports have associated repeated and prolonged occupational overexposure to light petroleum products with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Prolonged or repeated overexposure to xylene, a component of this product, has been associated with hearing damage in laboratory animals.

This material (or a component) may cause harm to the human fetus based on tests with laboratory animals. This material, or a component of this material, has been shown to cause cancer in laboratory animals. The relevance of this to humans is not clear. See Toxicological Information (Section 11).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS), heart (Cardiac).

TARGET ORGANS: May cause damage to the following organs: blood, kidneys, lungs, liver, mucous membranes, heart, upper respiratory tract, skin, auditory system, central nervous system (NS), eye, lens or cornea.

CARCINOGENICITY: This material contains ethylbenzene at concentrations at or above 0.1%. Ethylbenzene is considered possibly carcinogenic to humans by IARC (Group 2B) based on laboratory animal studies.

TOXICITY TO ANIMALS: Prolonged or repeated overexposure to xylene, a component of this product, has been associated with hearing damage in laboratory animals. Harmful to aquatic organisms.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: This mixture contains components that are potentially toxic to freshwater and saltwater ecosystems.

ENVIRONMENTAL FATE: Biodegradability: Rapidly biodegradable in aerobic conditions.

Partition Coefficient (log Kow): 2 to 3 (based on similar materials).

Photodegradation: Based on similar materials, this product will have a significant tendency to partition to air. Hydrocarbons from this product which do partition to air are expected to rapidly photodegrade.

Stability in Water: Degradation of this product in water occurs primarily by microbial action.

Distribution: Principally to air.



SAFETY DATA SHEET

Product: MARC 278 KLEAR KRETE

Form R04132

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. Non-usable product is regulated by US EPA as a hazardous waste (U239). Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (D018) characteristics. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): 55 G. Drum, 5 G. Pail
PROPER SHIPPING NAME: COATING SOLUTION, (CONTAINS XYLENE)
HAZARD CLASS: 3
ID NUMBER: UN1139
PACKING GROUP: PGIII
LABEL STATEMENT: FLAMMABLE LIQUID

PROPER SHIPPING NAME: 1 GAL., Quarts, Pints – PAINT COMPOUND, (Limited Quantity), [LTD QTY SYMBOL]

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): Not Applicable

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): The Comprehensive Environments Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are:

Xylene, all isomers [CAS No.: 1330-20-7] RQ = 100 lbs. (45.36 kg) Concentration: 60 -100%.
Ethylbenzene [CAS No.: 100-41-4] RQ = 1000 lbs. (453.6 kg) Concentration: 10 – 30%
Benzene [CAS No.: 71-43-2] RQ = 10 lbs. (4.536 kg) Concentration: <0.01%

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): Not Applicable

311/312 HAZARD CATEGORIES: The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories.

Fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard

SARA Title III, Section 313 Components: N/A

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 2, Flammability = 3, Reactivity = 0

REVISION DATE: 01/04/2019

DISCLAIMER: While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.