



6012 Windsor Dr.
Milan, TN 38358
731-238-3109

Safety Data Sheet

REPAIR MORTAR 45

Section 1. Identification

Product Use: A cementitious single component specialty bag mix for concrete repairs and overlay.
Date Issue: 4/21/20 **Revised:** 4/21/20

Emergency Telephone Number (U.S.) INFOTRAC 1-800-535-5053
Emergency Telephone Number (International) 1-352-323-3500
Prepared By: Hargett Materials Inc.
Website: www.hargettmaterials.com

Section 2. Hazard(s) identification

Emergency Overview

Danger! Overexposure to Repair Mortar 45 mixed with water can cause skin or eye damage in the form of chemical (caustic) Burns, including third-degree burns. The same type of injury can occur if wet or moist skin has prolonged exposure to dry Repair Mortar 45. Repair Mortar 45 and water mixture has a pH > 12.

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Health hazards
Skin corrosion/irritation: Category 1
Serious eye damage/eye irritation: Category 1
Sensitization, Skin: Category 1
Carcinogenicity/ inhalation: Category 1
Specific target organ toxicity, single exposure;
Respiratory tract irritation: Category 3

OSHA defined hazards Not classified

GHS Label Elements

**Hazard pictograms:****Signal Word:****Danger****Hazard statements:**

Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes serious eye damage
May cause cancer by inhalation
May cause respiratory irritation

Precautionary statement**Prevention:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

Response:

IF exposed or concerned: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower]. Wash contaminated clothing before reuse. IF SKIN irritation or rash occurs: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment (see section 4 below).

Relevant Routes of Exposure Eye contact, skin contact, inhalation and ingestion.

Effects resulting from Eye Contact

Exposure to dust may cause immediate or delayed irritation or inflammation. Eye contact by larger amounts of dry powder or splashes of wet Repair Mortar 45 may cause effects ranging from moderate eye irritation to chemical burns and blindness. Such exposures require immediate first aid (see Section 4, below) and medical attention to prevent significant damage to the eye.

Effects resulting from Skin Contact

Contact with Repair Mortar 45 can cause drying of the skin, severe irritation or chemical burns (third-degree), and dermatitis. A single short-term exposure to the dry powder is not likely to cause serious harm.

Overexposure to wet Repair Mortar 45 can cause severe skin damage in the form of chemical burns, including third-degree burns. The same type of injury can occur if wet or moist skin is exposed to dry Repair Mortar 45. Repair Mortar 45 dust in wet or moist clothing can transmit the caustic effects to the skin, causing chemical burns. Repair Mortar 45 causes skin burns with little warning; discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure.

Repair Mortar 45 can cause dermatitis by irritation and allergy. Irritant dermatitis is caused by fine particles of Repair Mortar 45 that abrade the skin mechanically and cause irritation resulting in dermatitis. Repair Mortar 45 may contain trace amounts of hexavalent chromium. Hexavalent chromium is associated with allergic skin reactions which may appear as contact dermatitis and skin ulcerations. Persons already sensitized may react

to their first exposure of Repair Mortar 45. Other individuals may develop allergic dermatitis after repeated exposure to Repair Mortar 45. The symptoms of allergic reactions may include reddening of the skin, rash, and irritation. Symptoms of chronic exposure to wet cement may include reddening, irritation, and eczematous rashes. Drying, thickening, and cracking of the skin and nails may also occur.

Effects resulting from Inhalation

Dusts may irritate the nose, throat, and respiratory tract. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate exposure limits. Prolonged and repeated inhalation of respirable crystalline silica-containing dust in excess of appropriate exposure limits has caused silicosis, fibrosis or scar tissue formation in the lungs.

Effects resulting from Ingestion

Although small quantities of dust are not known to be harmful, ingestion of large quantities may cause severe irritation and chemical burns of the mouth, throat, stomach and digestive tract. Do not swallow Repair Mortar 45.

Carcinogenicity

Repair Mortar 45 is not listed as a carcinogen by NTP, OSHA, ACGIH or IARC. However, it may contain trace amounts of substances listed as a carcinogen by NTP, OSHA, ACGIH and/or IARC: crystalline silica, chromium VI compounds (hexavalent chromium), nickel or lead.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of container in accordance with local, state, and federal regulations.

Hazards Not Otherwise Classified None known

Supplemental information None

Section 3. Composition/Information on Ingredients

COMPONENTS	CAS #	CONCENTRATION
Calcium Compounds (containing)	(CAS # 65997-15-1)	35% - 40%
- Tri Calcium Silicate, 3CaO.SiO ₂	(CAS #12168-85-3)	Varies
- Di Calcium Silicate, 2CaO.SiO ₂	(CAS #10034-77-2)	Varies

- Tri Calcium Aluminate, $3\text{CaO} \cdot \text{Al}_2\text{O}_3$	(CAS #12042-78-3)	Varies
- Calcium Aluminoferrite, a solid solution	(CAS #12068-35-8)	Varies
Gypsum $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	(CAS #13397-24-5)	0.75 – 3.5%
Quartz (Crystalline Silica)	(CAS #14808-60-7)	25% - 35%

Trace Elements

Trace constituents may include, but not limited to, calcium, magnesium, sodium sulfate, potassium, and sodium oxide. Since Repair Mortar 45 components are manufactured from materials mined from the earth, and process heat is provided by burning fuels derived from the earth, trace but detectable amounts of naturally occurring metals, and possibly harmful elements may be found during chemical analysis.

Section 4. First Aid Measures

Eyes

Quickly and gently blot or brush Repair Mortar 45 off the face. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain immediate medical attention.

Skin

Heavy exposure to Repair Mortar 45 dust, wet concrete or associated water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods (e.g. watchband, belts). Quickly and gently blot or brush away excess Repair Mortar 45. Immediately wash thoroughly with lukewarm, gently flowing water and not-abrasive soap. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns. Repair Mortar 45 causes skin burns with little warning; discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain of the severity of the burn until hours after the exposure.

Inhalation of Airborne Dust

Remove source of contamination or move victim to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen. DO NOT allow victim to move about unnecessarily. Seek medical help if coughing and other symptoms persist. Inhalation of large amounts of Portland cement requires immediate medical attention.

Ingestion

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 60 to 240 mL (2 to 8 oz.) water. Immediately obtain medical attention.

Section 5. Fire Fighting Measures

Extinguishing media

Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media

Do not use water jet or water- based fire extinguishers.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides

Special protective actions for

Move containers from fire area if this can be done without risk. Use

Fire-fighters

water fire-spray to keep fire-exposed containers cool.

**Special protective equipment
Fire-fighters**

Fire-fighters should wear appropriate protective equipment and self contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures**Take personal precautions**

Keep unnecessary and unprotected personnel from coming into contact with spilled material. Do not touch or walk through spilled material. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment when in contact with the material.

Cleaning-up spills

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter water ways through drainage systems. Collect dry material using a scoop. Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin. Wear appropriate personal protective equipment as described in Section VIII. Scrape up wet material and place in an appropriate container. Allow the material to "dry" before disposal. Do not attempt to wash cement down drains.

Disposal Method

Scrape up wet material and place in an appropriate container. Allow the material to "dry" before disposal. Do not attempt to wash cement down drains. Dispose of in accordance with state, federal, or local Regulations.

Section 7. Handling and Storage**Handling**

Use personal protective equipment (See Section VIII) when handling Repair Mortar 45. Persons using Repair Mortar 45 should be familiar with its properties and hazards. A key to using the product safely requires the user to recognize that Repair Mortar 45 reacts chemically with water to produce calcium hydroxide that can cause severe chemical burns.

Avoid actions that generate dust and cause dust to become airborne. Avoid prolonged exposure to dust.

Skin and eye contact with Repair Mortar 45 should be avoided. Do not get Repair Mortar 45 inside boots, shoes or gloves. Do not allow wet clothing saturated with Repair Mortar 45 to remain against the skin. Promptly remove clothing and shoes that are dusty or wet with Repair Mortar 45 fluids and launder/clean before reuse. Wash thoroughly after exposure to dust or wet Repair Mortar 45 mixtures.

Do not enter a confined space that stores or contains Repair Mortar 45 unless appropriate procedures and protection are available. Repair Mortar 45 can build up or adhere to walls of a confined space and release or fall suddenly. Likewise, do not walk on top of Repair Mortar 45 stored in vessels, bins, and silos (engulfment hazard).

Storage

Keep Repair Mortar 45 dry until used.

Further information

Drying Repair Mortar 45 is hygroscopic (it absorbs water). Repair Mortar 45 needs water to harden. It will draw water away from any material it contacts, including skin.

Respirable crystalline silica-containing dust may be generated by Repair Mortar 45 when hardened product is subjected to mechanical forces, such as sanding, crushing, grinding and cutting.

Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

1. Exposure Guidelines

Substance Name		OSHA PEL mg/m ³	ACGIH TLV mg/m ³
Calcium Compounds	Total dust	15	-
	Respirable	5	1
Calcium Sulfate (Gypsum)	Total dust	15	-
	Respirable	5	10
Magnesium Oxide (inhalable fraction)		15	10
Calcium Oxide		5	2
Silica (quartz)	Total dust	30/(% silica+2)	-
	Respirable	10/(% silica+2)	0.025

2. Engineering Controls

Avoid creating dust and actions that cause dust to become airborne. Use general or local exhaust ventilation as required to maintain exposures below appropriate exposure limits. Use product in well-ventilated areas. If ventilation is not adequate, see the respiratory protection recommended in this section.

3. Personal Protection Equipment

Eye/face protection

To prevent eye contact wear safety glasses with side shields, safety goggles or face shield when handling dust or wet Repair Mortar 45. Dust goggles should be worn in extremely dusty conditions. Wearing contact lenses when working with cement is not recommended.

Hand protection

Use impervious, waterproof, abrasion- and alkali-resistant gloves. Do not rely on barrier creams in place of impervious gloves. Do not get Repair Mortar 45 inside gloves.

Skin and body protection

Use impervious, waterproof, abrasion- and alkali-resistant boots and protective long-sleeved and long-legged clothing to protect the skin from contact with wet Repair Mortar 45. Where required to reduce foot and ankle exposure, wear impervious boots that are high enough to prevent Repair Mortar 45 from getting inside them. Do not get Repair Mortar 45 inside boots, shoes or gloves. Remove clothing and protective equipment that becomes saturated with cement and immediately wash exposed areas.

Respiratory protection

Ordinarily, a respirator should not be required when handling wet Repair Mortar 45. Use NIOSH-approved respirators, when an exposure limit could be exceeded, in poorly ventilated areas, or when dust causes discomfort or irritation. Respirator use must comply with applicable MSHA or OSHA standards which include provisions for a user training program, respirator repair and cleaning, respirator fit testing, and other requirements.

4. General hygiene considerations

Danger: Clean water should always be readily available for skin and (emergency) eye washing. Periodically wash areas contacted by Repair Mortar 45 with a pH neutral soap and clean, uncontaminated water. Wash again at the end of the work shift. If irritation occurs, immediately wash the affected area and seek treatment. If clothing becomes saturated with Portland cement. It should be removed and replaced with clean, dry clothing. Begin each day by wearing clean clothing and conclude the day with a bath or shower.

Section 9. Physical and Chemical Properties

Physical State	Solid/Powder
Color	Gray or white
Odor	Odorless
Specific gravity	2.75 to 3.15
Flammability	Not flammable
Flash point [method]	Not combustible
Auto ignition temperature	Not applicable
Flammable limits (approx. volume % in air)	Not applicable
Boiling point	1000°C (1832°F)
Melting point	1000°C (1832°F)
Decomposition temperature	Not determined
pH	12 – 13
Solubility (H2O)	Slightly soluble (0.1 – 1.0%)
Vapor pressure	Not Applicable
Vapor density	Not Applicable

Section 10. Stability and Reactivity

Reactivity Reacts slowly with water forming hardened hydrated compounds, releasing heat and producing a strong alkaline solution.

Stability Stable. Keep dry until used.

Incompatible Materials or Conditions

Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Repair Mortar 45 is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acid, aluminum metals and ammonium salts. Aluminum powder and other alkaline earth elements will react in wet mortar or cementitious material, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium.

Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, magnesium trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

Hazardous Decomposition

None known under normal conditions of storage and use.

Hazardous Polymerization

Will not polymerize.

Conditions to avoid

Contact with Incompatible Materials

Section 11. Toxicological Information

Other than hazards identified in Section 2, no other known toxicological information available.

Section 12. Ecological Information

Eco-toxicity

Repair Mortar 45 hardens with water or moisture and is not expected to present unusual eco-toxicity risks to plants or animals. No recognized unusual toxicity to plants or animals.

Relevant physical and chemical properties

(See Sections 9 and 10.)

Section 13. Disposal Considerations

Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Untreated waste should not be released to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe manner. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff, and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
Hazard class(es)	—	—	—
Packing group	—	—	—
Environmental hazards	None.	None.	None
Additional information	—	—	—

Section 15. Regulatory Information

Status under USDOL-OSHA Hazard Communication Rule, 29 CFR 1910.1200

This product is considered a "hazardous chemical" under this regulation, and should be part of any hazard communication program.

Status under CERCLA/SUPERFUND 40 CFR 117 and 302

Not listed.

Hazard Category under SARA (Title III), Sections 311 and 312

This product qualifies as a "hazardous substance" with delayed health effects.

Status under SARA (Title III), Section 313

This product does not contain Emergency Planning and Community Right to Know (EPCRA) Section 313 chemicals in excess of the applicable de minimis concentration specified in EPCRA Section 313 Section 372.38(a). Trace amounts of naturally occurring chemicals might be detected during chemical analysis.

Status under TSCA (as of May 1997)

The ingredients of this product are listed on the TSCA inventory or are exempt.

Status under the Federal Hazardous Substances Act

This product is a "hazardous substance" subject to statutes promulgated under the subject act.

Status under California Proposition 65

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. California law requires the manufacturer to give the above warning in the absence of definitive testing to prove that the defined risks do not exist.

State Right to Know:

Calcium Compounds (CAS # 65997-15-1)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Washington - Permissible Exposure Limits - TWAs

Quartz (crystalline silica) (14808-60-7)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Washington - Permissible Exposure Limits - TWAs

Gypsum (7778-18-9)

U.S. - New Jersey - Right to Know Hazardous Substance

Section 16. Other Information**Notice to reader**

While the information provided in this safety data sheet 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. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Portland Cement to produce Portland Cement products. Users should review other relevant material safety data sheets before working with this Portland Cement or working on Portland Cement products, for example, Portland Cement concrete.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HMI, Inc. except that the product shall conform to contracted specifications. The information provided herein was believed by HMI Inc. to be accurate at the 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 product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or 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 Buyer's claim is based on contract, breach of warranty, negligence or otherwise. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Portland Cement to produce Portland Cement products. Users should review other relevant safety data sheets before working with Portland Cement or working on Portland Cement products, for example, Portland Cement concrete.

Abbreviations

ACGIH — American Conference of Governmental Industrial Hygienists
CAS — Chemical Abstract Service
CERCLA — Comprehensive Emergency Response and Comprehensive Liability Act
CFR — Code of Federal Regulations

DOT — Department of Transportation
GHS — Globally Harmonized System Globally Harmonized System
HEPA - High Efficiency Particulate Air
IATA — International Air Transport Association
IARC — International Agency for Research on Cancer
IMDG — International Maritime Dangerous Goods
NIOSH — National Institute of Occupational Safety and Health
NOEC — No Observed Effect Concentration
NTP — National Toxicology Program
OSHA — Occupational Safety and Health Administration
PEL — Permissible Exposure Limit
REL — Recommended Exposure Limit
RQ — Reportable Quantity

SARA — Superfund Amendments and Reauthorization Act
SDS — Safety Data Sheet
TLV — Threshold Limit Value
TPQ — Threshold Planning Quantity
TSCA — Toxic Substances Control Act
TWA — Time -Weighted Average
UN — United Nations