Safety Data Sheet
acc. to OSHA HCS

Date of issue: 03/25/2026 Reviewed on 03/25/2026

1 Identification

· **Product identifier**

· **Trade name: HARMIX FE**
· **Other means of identification**

· **Article number:** 622A
· **Restrictions** For industrial use only
· **Application of the substance / the mixture** Refractory Material
· **Uses advised against** Avoid dry cutting, blasting, or dust generation.

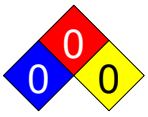
· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
HarbisonWalker International Minerals, Inc.
2000 Park Lane Drive, Suite 400
Pittsburgh, PA 15275
412-375-6600

· **Information department:**
SDS@thinkHWI.com
+33 (0)2 59 60 31 14
www.thinkHWI.com
· **Emergency telephone number:** CHEMTREC 24 hour Emergency Number: 1-800-424-9300

2 Hazard(s) identification

· **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Additional information:**
Observe good industrial hygiene practices.Wash hands after handling.Store in a manner to minimize airborne dust.Dispose of waste and residues in accordance with local authority requirements.
· **Information pertaining to particular dangers for man and environment:**
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0
Fire = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable
· **Classification according to (d)(1)(ii) of § 1910.1200**
The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

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· **Hazards not otherwise classified**
There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

1309-48-4	Magnesium oxide	80–100% *

* Actual concentration ranges are withheld as a trade secret.
· **Additional information:**
The exact chemical identity and/or percentage (concentration) of the composition has been withheld as a trade secret.

4 First-aid measures

· **Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:** Move to fresh air. Call a physician if symptoms develop or persist.
· **After skin contact:**
Wash off with soap and water. Get medical attention if irritation develops and persists.
· **After eye contact:** Rinse with water. Get medical attention if irritation develops and persists.
· **After swallowing:** Rinse mouth. Get medical attention if symptoms occur.
· **Information for doctor:**
Dusts may irritate the respiratory tract, skin and eyes.
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **For safety reasons unsuitable extinguishing agents:**
Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).
Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).
· **Protective equipment:** No special measures required.
· **Additional information**
· **Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
· **For non-emergency personnel** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Precautions for safe handling**
Avoid prolonged exposure. Observe good industrial hygiene practices.
Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid prolonged exposure. Practice good housekeeping.
· **Information about protection against explosions and fires:** No special measures required.

· **Handling:**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required

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· **Further information about storage conditions:** None.
· **Storage class:** No further relevant information available.

8 Exposure controls/personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
1309-48-4 Magnesium oxide	
PEL	Long-term value: 15* mg/m³ fume; *total particulate
TLV	Long-term value: 10* mg/m³ *as inhalable fraction, A4

· **Regulatory information**
PEL: Guide to Occupational Exposure Values (OSHA PELs)
TLV: Guide to Occupational Exposure Values (TLV)
· **Ingredients with biological limit values:**
The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Appropriate engineering controls**
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
· **Breathing equipment:**

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Wear safety glasses with side shields (or goggles).

· **Body protection:**

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Solid
· **Color:**	Whitish
· **Odor:**	uncharacteristic
· **Odor threshold:**	Not determined
· **Melting point/Melting range:**	2,802 °C (3702 °F)
· **Boiling point/Boiling range:**	3,600 °C (38.500 °F)
· **Flammability:**	Not determined
· **Explosion limits:**	
· **Lower:**	Not determined
· **Upper:**	Not determined
· **Flash point:**	Not applicable
· **Auto igniting:**	Not determined
· **pH-value:**	Not applicable
· **Viscosity:**	
· **Kinematic:**	Not applicable
· **Kinematic:**	Not applicable
· **Solubility in / Miscibility with**	
· **Water:**	Soluble.
· **Partition coefficient (n-octanol/water):**	Not determined
· **Vapor pressure:**	Not applicable
· **Vapor pressure:**	
· **Density at 20 °C (68 °F):**	3.58 g/cm³ (29.8751 lbs/gal)
· **Relative density**	Not determined
· **Vapor density**	Not applicable
· **Particle characteristics**	Not determined

· **Other information**	
· **Form:**	Solid in various forms
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Solvent separation test**	
· **Organic solvents:**	
· **Solids content:**	100.0 %
· **Change in condition**	
· **Oxidizing properties**	Not applicable.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:**
Strong oxidizing agents. Strong acids.
Strong oxidizing agents. Strong acids.

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No dangerous decomposition products known.
· **Additional information:**
· **Information on toxicological effects**
· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:**
· **on the skin:** Dust may cause temporary mechanical irritation.
· **on the eye:** Dust may cause temporary mechanical irritation.
· **Sensitization:**
Based on available data, the substance is not expected to cause skin or respiratory sensitization.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **Specific target organ toxicity - single exposure**
Based on available data, the classification criteria are not met.
· **Specific target organ toxicity - repeated exposure**
Based on available data, the classification criteria are not met.
· **Aspiration hazard** Not Applicable
· **Other information (about experimental toxicology):**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
· **Interactive effects** No interactive effects between components are known.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

· **Alternative sources for toxicological information**
No non-standard sources for toxicological information where used.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Other information:** No further relevant information available.
· **Other information:** No further relevant information available.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable
· **Other adverse effects**
· **General notes:** Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

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· **Waste disposal key:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	not regulated
· **UN proper shipping name**	
· **DOT, IMDG, IATA**	not regulated
· **Transport hazard class(es)**	
· **DOT, IMDG, IATA**	
· **Class**	not regulated
· **Label**	
· **DOT, IMDG, IATA**	not regulated
· **Environmental hazards:**	Not applicable
· **Marine pollutant:**	Not applicable
· **Transport/Additional information:**	Not applicable
· **Poison inhalation hazard:**	not regulated

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.

· **Hazardous Air Pollutants**
None of the ingredients is listed.

· **Proposition 65**
· **Chemicals known to cause cancer:**
This product can expose you to Lead and Nickel compounds, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

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· **TLV (Threshold Limit Value)**
All components have the value A4.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)** Void
· **Hazard pictograms** Void
· **Signal word** Void

· **Hazard-determining components of labeling:** Void
· **Precautionary statements** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge on creation date. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Reasons for alterations**

· **Department issuing SDS:** Global Product Stewardship Team
· **Contact:** SDS@thinkHWI.com
· **Date of previous version**
· **Version number of previous version:** 1
· **Date of preparation / last revision**
· **Date of preparation** 03/25/2026
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit