

## 1. Identification

|                                      |  |
|--------------------------------------|--|
| <b>Product identifier</b>            | <b>H-W 1-91 GUNNING MIX</b>  |
| <b>Other means of identification</b> |  |
| <b>Brand Code</b>                    | 778A   |
| <b>Recommended use</b>               | For Industrial Use Only  |
| <b>Recommended restrictions</b>      | Avoid dry cutting, blasting, or dust generation. Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations. |

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

|                               |   |              |  |
|-------------------------------|---|--------------|--|
| <b>Company name</b>           | HarbisonWalker International  |              |  |
| <b>Address</b>                | 1305 Cherrington Parkway, Suite 100<br>Moon Township, Pennsylvania 15108 US |              |  |
| <b>Telephone</b>              | General Phone:  | 412-375-6600 |  |
| <b>Website</b>                | www.thinkHWI.com  |              |  |
| <b>Emergency phone number</b> | Not available.  |              |  |

## 2. Hazard(s) identification

|                              |   |             |
|------------------------------|---|-------------|
| <b>Physical hazards</b>      | Not classified.                                   |             |
| <b>Health hazards</b>        | Skin corrosion/irritation                         | Category 1  |
|                              | Serious eye damage/eye irritation                 | Category 1  |
|                              | Carcinogenicity                                   | Category 1A |
|                              | Specific target organ toxicity, repeated exposure | Category 1  |
| <b>Environmental hazards</b> | Not classified.                                   |             |
| <b>OSHA defined hazards</b>  | Not classified.                                   |             |
| <b>Label elements</b>        |   |             |



|  |  |
|--|--|
| <b>Signal word</b>                               | Danger   |
| <b>Hazard statement</b>                          | Causes severe skin burns and eye damage. Causes serious eye damage. May cause cancer. Causes damage to organs through prolonged or repeated exposure.  |
| <b>Precautionary statement</b>                   |  |
| <b>Prevention</b>                                | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.   |
| <b>Response</b>                                  | If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse. |
| <b>Storage</b>                                   | Store locked up.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.  |

## Supplemental information

Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                            | Common name and synonyms                 | CAS number | %        |
|--|--|------------|----------|
| Magnesium Oxide                          |  | 1309-48-4  | 80 - 100 |
| Amorphous Silica                         | Fumed Silica<br>Silica, crystalline free | 7631-86-9  | 2.5 - 10 |
| Bentonite                                |  | 1302-78-9  | 2.5 - 10 |
| Calcium Oxide                            |  | 1305-78-8  | 2.5 - 10 |
| Diiron Trioxide                          |  | 1309-37-1  | 1 - 2.5  |
| Quartz (SiO <sub>2</sub> )               |  | 14808-60-7 | < 0.5    |
| Other components below reportable levels |  |            | 2.5 - 10 |

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse aggregate or as part of the clays or sands.

## 4. First-aid measures

### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

### Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

### Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

### Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Prolonged exposure may cause chronic effects.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

### General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

## 5. Fire-fighting measures

### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

### Unsuitable extinguishing media

Not available.

### Specific hazards arising from the chemical

Not applicable.

### Special protective equipment and precautions for firefighters

Not available.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Material can be slippery when wet. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage****Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                                  | Type | Value                  | Form               |
|---|------|------------------------|--------------------|
| Calcium Oxide (CAS 1305-78-8)               | PEL  | 5 mg/m <sup>3</sup>    |                    |
| Diiron Trioxide (CAS 1309-37-1)             | PEL  | 10 mg/m <sup>3</sup>   | Fume.              |
| Magnesium Oxide (CAS 1309-48-4)             | PEL  | 15 mg/m <sup>3</sup>   | Total particulate. |
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | PEL  | 0.05 mg/m <sup>3</sup> | Respirable dust.   |

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

| Components                                  | Type | Value                 | Form                 |
|---|------|-----------------------|----------------------|
| Amorphous Silica (CAS 7631-86-9)            | TWA  | 0.8 mg/m <sup>3</sup> |                      |
|   |      | 20 mppcf              |                      |
| Diiron Trioxide (CAS 1309-37-1)             | TWA  | 5 mg/m <sup>3</sup>   | Respirable fraction. |
|   |      | 15 mg/m <sup>3</sup>  | Total dust.          |
|   |      | 50 mppcf              | Total dust.          |
|   |      | 15 mppcf              | Respirable fraction. |
| Magnesium Oxide (CAS 1309-48-4)             | TWA  | 5 mg/m <sup>3</sup>   | Respirable fraction. |
|   |      | 15 mg/m <sup>3</sup>  | Total dust.          |
|   |      | 50 mppcf              | Total dust.          |
|   |      | 15 mppcf              | Respirable fraction. |
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | TWA  | 0.1 mg/m <sup>3</sup> | Respirable.          |
|   |      | 2.4 mppcf             | Respirable.          |

**US. ACGIH Threshold Limit Values**

| Components                    | Type | Value               | Form |
|-------------------------------|------|---------------------|------|
| Calcium Oxide (CAS 1305-78-8) | TWA  | 2 mg/m <sup>3</sup> |      |

## US. ACGIH Threshold Limit Values

| Components                                  | Type | Value                   | Form                 |
|---|------|-------------------------|----------------------|
| Diiron Trioxide (CAS 1309-37-1)             | TWA  | 5 mg/m <sup>3</sup>     | Respirable fraction. |
| Magnesium Oxide (CAS 1309-48-4)             | TWA  | 10 mg/m <sup>3</sup>    | Inhalable fraction.  |
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | TWA  | 0.025 mg/m <sup>3</sup> | Respirable fraction. |

## US. NIOSH: Pocket Guide to Chemical Hazards

| Components                                  | Type | Value                  | Form             |
|---|------|------------------------|------------------|
| Amorphous Silica (CAS 7631-86-9)            | TWA  | 6 mg/m <sup>3</sup>    |                  |
| Calcium Oxide (CAS 1305-78-8)               | TWA  | 2 mg/m <sup>3</sup>    |                  |
| Diiron Trioxide (CAS 1309-37-1)             | TWA  | 5 mg/m <sup>3</sup>    | Dust and fume.   |
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | TWA  | 0.05 mg/m <sup>3</sup> | Respirable dust. |

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

### 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. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves.

##### Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

#### Respiratory protection

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

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.



### General hygiene considerations

Observe any medical surveillance requirements. 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.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Solid.

#### Form

Solid.

#### Color

Not available.

#### Odor

Not available.

#### Odor threshold

Not available.

#### pH

Not available.

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

Not available.

#### Flash point

Not available.

|   |                |
|---|----------------|
| <b>Evaporation rate</b>                             | Not available. |
| <b>Flammability (solid, gas)</b>                    | Not available. |
| <b>Upper/lower flammability or explosive limits</b> |                |
| <b>Flammability limit - lower (%)</b>               | Not available. |
| <b>Flammability limit - upper (%)</b>               | Not available. |
| <b>Explosive limit - lower (%)</b>                  | Not available. |
| <b>Explosive limit - upper (%)</b>                  | Not available. |
| <b>Vapor pressure</b>                               | Not available. |
| <b>Vapor density</b>                                | Not available. |
| <b>Relative density</b>                             | Not available. |
| <b>Solubility(ies)</b>                              |                |
| <b>Solubility (water)</b>                           | Not available. |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available. |
| <b>Auto-ignition temperature</b>                    | Not available. |
| <b>Decomposition temperature</b>                    | Not available. |
| <b>Viscosity</b>                                    | Not available. |
| <b>Other information</b>                            |                |
| <b>Explosive properties</b>                         | Not explosive. |
| <b>Oxidizing properties</b>                         | Not oxidizing. |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Chlorine. Phosphorus.<br>Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure. |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
| <b>Skin contact</b> | Causes severe skin burns.  |
| <b>Eye contact</b>  | Causes serious eye damage.   |
| <b>Ingestion</b>    | Causes digestive tract burns.  |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. |
|---|---|

### Information on toxicological effects

|  |  |
|--|--|
| <b>Acute toxicity</b>                    | Not known.                               |
| <b>Skin corrosion/irritation</b>         | Causes severe skin burns and eye damage. |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye damage.               |

### Respiratory or skin sensitization

|                                  |   |
|----------------------------------|---|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.                             |
| <b>Skin sensitization</b>        | This product is not expected to cause skin sensitization. |

|                               |  |
|-------------------------------|--|
| <b>Germ cell mutagenicity</b> | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
|-------------------------------|--|

## Carcinogenicity

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

### IARC Monographs. Overall Evaluation of Carcinogenicity

|   |   |
|---|---|
| Amorphous Silica (CAS 7631-86-9)            | 3 Not classifiable as to carcinogenicity to humans. |
| Diiron Trioxide (CAS 1309-37-1)             | 3 Not classifiable as to carcinogenicity to humans. |
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | 1 Carcinogenic to humans.                           |

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

|   |        |
|---|--------|
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | Cancer |
|---|--------|

### US. National Toxicology Program (NTP) Report on Carcinogens

|   |                               |
|---|-------------------------------|
| Quartz (SiO <sub>2</sub> ) (CAS 14808-60-7) | Known To Be Human Carcinogen. |
|---|-------------------------------|

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

#### Developmental effects

|                            |   |
|----------------------------|---|
| Quartz (SiO <sub>2</sub> ) | 0 |
|----------------------------|---|

#### Developmental effects - EU category

|                            |   |
|----------------------------|---|
| Quartz (SiO <sub>2</sub> ) | 0 |
|----------------------------|---|

#### Embryotoxicity

|                            |   |
|----------------------------|---|
| Quartz (SiO <sub>2</sub> ) | 0 |
|----------------------------|---|

#### Reproductivity

|                            |   |
|----------------------------|---|
| Quartz (SiO <sub>2</sub> ) | 0 |
|----------------------------|---|

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

**Hazardous waste code** 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.

**Waste from residues / unused products** Not available.

**Contaminated packaging** Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Quartz (SiO<sub>2</sub>) (CAS 14808-60-7)

Cancer  
lung effects  
immune system effects  
kidney effects

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### Classified hazard categories

Skin corrosion or irritation  
Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### California Proposition 65



**WARNING:** This product can expose you to Quartz (SiO<sub>2</sub>), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (SiO<sub>2</sub>) (CAS 14808-60-7)

Listed: October 1, 1988

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Magnesium Oxide (CAS 1309-48-4)

Quartz (SiO<sub>2</sub>) (CAS 14808-60-7)

## International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| Taiwan                      | Taiwan Chemical Substance Inventory (TCSI)                             | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 05-29-2015

**Revision date** 04-06-2021

**Version #** 02

**Disclaimer** 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.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.