

1. Identification of the chemical and information about the manufacturer or supplier

1.1 Identification of the chemical products

1.1.1 Technical name **MIZZOU CASTABLE PLUS; MIZZOU CASTABLE PLUS W/F; MIZZOU CASTABLE PLUS H**

Other means of identification

Brand Code 5976, 454B, 4622, 715C

1.1.2 Recommended use of the chemical and restrictions on use

Recommended use For Industrial or Professional Use Only

Limitations on use DO NOT INGEST. KEEP MATERIAL AWAY FROM CHILDREN AND ANIMALS TO PREVENT ACCIDENTAL INGESTION. Avoid dry cutting, blasting, or dust generation.

1.2 Manufacturer/Importer/Supplier/Distributor information

1.2.1 Manufacturer

Company name HarbisonWalker International

1.2.2 Address (post and legal) 1305 Cherrington Parkway, Suite 100

Moon Township, Pennsylvania 15108

United States

Website www.thinkHWI.com

Contact person Product Safety Specialist

1.2.3 Telephone, including Emergency consultations and time limits

Telephone General Phone: 412-375-6600

Emergency phone number CHEMTREC 24 HOUR 1-800-424-9300
EMERGENCY #

1.2.4 Fax

1.2.5 E-mail sds@thinkhwi.com

2. Hazard(s) identification

2.1. Hazard identification of chemical product as a whole (classification according to GOST 12.1.007-76 and GHS)

Classification according to GOST 12.1.007-76 None, the product is a mixture.

GHS classification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Specific target organ toxicity, repeated exposure Category 2

Environmental hazards Not classified.

2.2 Labeling elements in compliance with GOST 31340-2013

2.2.1 Signal word Danger



2.2.3 Hazard statement May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Do not breathe dust.

Response IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical assistance if you feel unwell. Call a POISON CENTER/doctor if you feel unwell.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards 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**3.1 Information on product as a whole**

3.1.1 Chemical name (IUPAC) MIZZOU CASTABLE PLUS; MIZZOU CASTABLE PLUS W/F; MIZZOU CASTABLE PLUS H

3.1.2 Chemical formula Al₆O₁₃Si₂ (1302-93-8), O₂Si (14464-46-1), O₂Si (14808-60-7)

3.1.3 General description of the composition (taking into account the brand assortment; preparation method) Not applicable.

3.2 Components

Components	Hygienic standards in the working area					
	Concentration by weight (%)	MAC, mg/m ³	TSEL, mg/m ³	Hazard classification	CAS-No.	EC No.
Mullite	50 - 70	8 Dust.	4 Dust.	3	1302-93-8	215-113-2
Cement, Alumina, Chemicals	2,5 - 10	None.	None.		65997-16-2	266-045-5
Cristobalite	2,5 - 10	None.	None.		14464-46-1	238-455-4
Quartz (SiO ₂)	0,1 - 1	None.	None.		14808-60-7	238-878-4

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**4.1. Observed symptoms**

4.1.1 In case of exposure via inhalation Dust may irritate respiratory system.

4.1.2 In contact with skin Dust or powder may irritate the skin.

4.1.3 In contact with eyes Dust may irritate the eyes.

4.1.4 In case of exposure via ingestion Expected to be a low ingestion hazard.

4.2 First-aid measures to be provided to victims

4.2.1 In case of exposure via inhalation Move to fresh air. Call a physician if symptoms develop or persist.

4.2.2 In contact with skin Wash off with soap and water. Get medical attention if irritation develops and persists.

4.2.3 In contact with eyes Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

4.2.4 In case of exposure via ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2.5 Contraindications Not available.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting and explosion safety measures and means

5.1 General characteristics of fire-explosion properties Not available.

5.2 Fire-explosion indicators Not available.

5.3 Combustion and/or thermal destruction products and hazards arising from these Not available.

5.4 Recommended extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

5.5 Forbidden extinguishing media Not available.

5.6 Special protective equipment for firefighters Not available.

5.7 Specific extinguishing methods Not available.

6. Accident and emergency prevention and response measures and their consequences

6.1 Measures to prevent harmful effects on people, environment, buildings, constructions, etc. in case of accidents and emergencies

6.1.1 General required actions in case of an accident or emergency Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.1.2 Personal protection equipment in case of the accident Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2 Procedures for the elimination of accidents and emergencies

6.2.1 Procedures in case of leaks, spills, splashes Not available.

6.2.2 Actions in case of fire Not available.

Methods and materials for containment and cleaning up Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

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. Storage and handling requirements of chemicals during loading and unloading

7.1 Safety precautions when handling chemical products

7.1.1 Technical safety measures No specific recommendations.

7.1.2 Environmental protection measures Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not breathe dust.

7.1.3 Recommended safe handling and transportation advice Should be handled in closed systems, if possible. Do not breathe dust. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS.

Local and general ventilation Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Chemical storage requirements

7.2.1 Terms and conditions for safe storage Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

7.2.2 Packaging Store in original tightly closed container.

7.3 Safety measures and storage requirements at domestic use The product is not intended for domestic use.

8. Equipment for monitoring exposure and personal protective equipment

8.1 Parameters of the working area that require monitoring

Occupational exposure limits No exposure limits noted for ingredient(s).

8.2 Measures to ensure the content of harmful substances in the working area below the exposure level concentration 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. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

8.3 Worker personal protective equipment

8.3.1 General recommendations Use personal protective equipment as required.

8.3.2 Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
8.3.3 Protective equipment	
Eye/face protection	Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.
Hand protection	Wear appropriate chemical resistant gloves.
Other	Use of an impervious apron is recommended.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
8.3.4 Personal protection equipment in case of domestic use	The product is not intended for domestic use.
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

9.1 Physical appearance

Physical state	Solid.
Form	Powder.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.

9.2 Parameters characterizing basic properties of the product

pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Density	Not available.
Viscosity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Other data	
Explosive properties	Not explosive.
Flammability (solid, gas)	Not available.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

10.1 Chemical stability	Material is stable under normal conditions.
Hazardous decomposition products	No hazardous decomposition products are known.
10.2 Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.3 Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Incompatible materials	Acids. Chlorine. Fluorine. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure.

11. Toxicological information

11.1 General exposure characteristics Dusts may irritate the respiratory tract, skin and eyes.

11.2 Routes of exposure Inhalation. Skin contact. Eye contact.

11.3 Affected/target organs, tissues and systems of humans

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure.

11.4 Information on health hazards in case of direct exposure to the product and its effect

Effect on upper respiratory tract irritation Dust may irritate respiratory system. Inhalation of dusts may cause respiratory irritation.

Respiratory or skin sensitization

Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended

Not listed.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Aspiration hazard Not an aspiration hazard.

11.5 Information on long-term hazardous health effects

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

Cristobalite (CAS 14464-46-1) 1 Carcinogenic to humans.

Quartz (SiO₂) (CAS 14808-60-7) 1 Carcinogenic to humans.

Sanitary-Epidemiological Rules, 1.2.2353-08, Chemical substances, mixtures and products which are carcinogenic factors, 21 April 2008

Cristobalite (CAS 14464-46-1) Inhalation

Quartz (SiO₂) (CAS 14808-60-7) Inhalation

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

Developmental effects

Quartz (SiO₂) 0

Developmental effects - EU category

Quartz (SiO₂) 0

Embryotoxicity

Quartz (SiO₂) 0

Reproductivity

Quartz (SiO₂) 0

11.5 Information on long-term hazardous health effects

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Cumulativeness Not available.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

11.6 Acute toxicity data Not known.

12. Environmental impact information

12.1 General description of the impact on the environment 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.

12.2 Routes of exposure to environment Adverse effects may be caused by large spill in the environment as a result of accidents during transportation, storage, use, handling, depressurization of the container or/and the uncontrolled waste disposal.

12.3 The most important characteristics of the environmental impact

12.3.1 Hygienic standards Not available.

12.3.2 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.

12.3.3 Biomigration and transformation of the environment due to the biodegradation or other processes

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. Recommendations for waste (residues) disposal

13.1 Safety precautions when handling the waste generated during use, storage, transportation 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.

13.2 Information on the location and disposal methods, recycling or disposal of product waste, including packaging Not available.

13.3 Recommendation on the waste disposal generated during its domestic use Not available.

14. Transport information

ADR

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. National and international regulatory information

15.1 National legislation

15.1.1 Laws of the Russian Federation On technical regulation.
On sanitary and epidemiological welfare of the population.
On Environmental Protection.
On Air Protection.

15.1.2 Information about the documentation, regulatory requirements for the protection of human health and environment

Sanitary-Epidemiological Rules, 1.2.2353-08, Chemical substances, mixtures and products which are carcinogenic factors, 21 April 2008

Cristobalite (CAS 14464-46-1) Inhalation

Quartz (SiO₂) (CAS 14808-60-7) Inhalation

Hygiene Norm GN 2.2.5.1313-03. Executive No. 76 of 30 April 2003. Maximum allowable concentration (MAC) of harmful substances in the air of working zones, as amended

Not listed.

15.2 International Conventions and Agreements

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
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**16.1 Information on revision of the SDS**

Issue date	02-26-2019
Version #	01
Previous SDS number	Not applicable.
Revision information	Product and Company Identification: Product and Company Identification

16.2 List of references used in compiling the safety data sheet

Not available.

List of abbreviations

Not available.

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.