SAFETY DATA SHEET

1. Identification

Product identifier KAST-O-LITE 30 LI PLUS

Other means of identification

Brand Code 5874, 416C

Recommended use of the chemical and restrictions on use Recommended use For Industrial Use Only

Recommended restrictions

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

HarbisonWalker International Company name

1305 Cherrington Parkway, Suite 100 **Address**

> Moon Township Pennsylvania 15108

US

General Phone: **Telephone** 412-375-6600

Website www.thinkHWI.com

CHEMTREC 24 HOUR 1-800-424-9300 **Emergency phone number**

EMERGENCY #

2. Hazards identification

GHS classification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A Category 2

Specific target organ toxicity, repeated

exposure

Not classified. **Environmental hazards**

GHS label elements, including precautionary statements

Pictograms

Signal word

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

Precautionary statements

Obtain special instructions before use. Do not handle until all safety precautions have been read Prevention

and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective

gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention. Response Storage Store in a manner to minimize airborne dust.

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

Other hazards which do not

result in classification

None known.

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse **Supplemental information**

aggregate or as part of the clays or sands.

3. Composition/information on ingredients

Substance or mixture Mixture

Chemical name	Common name and synonyms	CAS Number	Concentration (%)
Cement, Alumina, Chemicals		65997-16-2	10 - < 20
Mullite		1302-93-8	5 - < 10

Material name: KAST-O-LITE 30 LI PLUS SDS SINGAPORE

Chemical name	Common name and synonyms	CAS Number	Concentration (%)
Quartz (SiO2)		14808-60-7	5 - < 10
Cristobalite		14464-46-1	3 - < 5
Other components below reportable levels			60 - < 70

4. First-aid measures

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

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Prolonged exposure may cause chronic effects.

Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delayed

Indication of immediate Provide general supportive measures and treat symptomatically. Keep victim under observation.

medical attention and special

Symptoms may be delayed.

treatment needed

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s)

Use fire-extinguishing media appropriate for surrounding materials.

involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

Not available.

media Specific hazards arising from

the chemical

Not available.

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. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Environmental precautions

Methods and materials for containment and cleaning up Avoid discharge into drains, water courses or onto the ground.

Stop the flow of material, if this is without risk. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

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. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Not available.

8. Exposure controls/personal protection

Occupational exposure limits

Singapore. PELs. (Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order) Components **Form** Type Value

	. 7		
Cristobalite (CAS	TWA	0.05 mg/m3	Respirable dust.
14464-46-1) Quartz (SiO2) (CAS	TWA	0.1 mg/m3	Respirable dust.
14808-60-7)		•	-

Control parameters/Occupational exposure limits

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11.7.	AUJUIT	111111111111111111111111111111111111111			values

Components	Туре	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Values

ComponentsTypeValueFormQuartz (SiO2) (CAS
14808-60-7)TWA0.025 mg/m3Respirable fraction.

Exposure guidelinesOccupational 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 control measures

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.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Not available.

Other 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 Not available.

range

Not available. Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Flammability limit - lower (%) Not available. Not available. Flammability limit - upper (%) Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available Vapor pressure Not available. Vapor density Not available. Not available. Relative density

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other data

Not explosive. **Explosive properties** Not oxidizing Oxidizing properties

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Incompatible materials Acids. Powerful oxidizers. Chlorine.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may

not be specific to industrial application exposure.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation.

Expected to be a low ingestion hazard. Ingestion

Acute toxicity Not known.

Direct contact with eyes may cause temporary irritation. **Symptoms** Prolonged skin contact may cause temporary irritation. Skin corrosion/irritation Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica Carcinogenicity

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.

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

Specific target organ toxicity single exposure

Not classified.

Specific target organ toxicity repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Not an aspiration hazard.

Chronic effects

May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful. Prolonged exposure may cause chronic effects.

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12. Ecological information

EcotoxicityThe 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 this product.

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 methods/information 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.

Special precautions Not available.

14. Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Singapore. Controlled Narcotic Drugs (Misuse of Drugs Act, First Schedule, Part I, II & III)

Not regulated.

Singapore. Controlled Specified Drugs (Misuse of Drugs Act, Fourth Schedule)

Not regulated.

Singapore. Prior Informed Consent (PIC) Substances (Environment Protection and Management Act, 2nd Schedule, Part 1, Jul. 1, 2013)

Not regulated.

Chemical Weapons Prohibition (Act)

Not applicable.

Environmental Protection and Management (Hazardous Substances) Regulations

Not applicable.

Environmental Public Health Act

Not applicable.

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

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)

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Country(s) or region	Inventory name	On inventory (yes/no)*
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)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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

References Not available.

Issued by Not available.

Prepared by 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.

Issue date06-29-2018Key/legendNot applicable.

Revision information Product and Company Identification: Product Codes

Composition / Information on Ingredients: Ingredients

Material name: KAST-O-LITE 30 LI PLUS 5874, 416C Version #: 01 Issue date: 06-29-2018