SAFETY DATA SHEET



1. Identification

Product identifier KAST-O-LITE 19 L PLUS

Other means of identification

Brand Code 5461

Recommended use For Industrial Use Only

Recommended restrictions Avoid dry cutting, blasting, or dust generation. Users should be informed of the potential presence

412-375-6600

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

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township Pennsylvania

15108 US

Telephone General Phone:

Website www.thinkHWI.com Emergency phone number Not available.

Supplier Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

Label elements



Signal word Danger

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

Precautionary statement

Prevention 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.

Response IF exposed or concerned: Get medical advice/attention.

Storage Store away from incompatible materials.

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

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Cement, Alumina, Chemicals		65997-16-2	40 - 60

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Chemical name	Common name and synonyms	CAS number	%
Mullite		1302-93-8	2.5 - 10
SILICA, AMORPHOUS, FUMED		61790-53-2	2.5 - 10
Kaolin		1332-58-7	1 - 2.5
SILICA, CRYSTALLINE, CRISTOBALITE		14464-46-1	1 - 2.5
SILICA, CRYSTALLINE, QUARTZ		14808-60-7	0.1 - 2.5
Titanium Dioxide		13463-67-7	< 0.5
Other components below reportable	levels		40 - 60

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

Prolonged exposure may cause chronic effects.

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

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically. 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

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Use fire-extinguishing media appropriate for surrounding materials.

Not available.

Not applicable.

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. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

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.

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. 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

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Values Components	Туре	Value	Form
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Canada. Alberta OELs (Occupationa	ıl Health & Safety Code, Sc	chedule 1, Table 2)	
Components	Туре	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable.
		0.025 mg/m3	Respirable particles.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Canada. British Columbia OELs. (Oc	ccupational Exposure Limi	ts for Chemical Substances, Oc	cupational Health and
Safety Regulation 296/97, as amendo Components	ed) Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable.
SILICA, AMORPHOUS, FUMED (CAS 61790-53-2)	TWA	4 mg/m3	Total
		1.5 mg/m3	Respirable.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Canada. Manitoba OELs (Reg. 217/2	-	· · · · · · · · · · · · · · · · · · ·	Form
Components	Туре	Value	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
	ynosure to Biological or C	Chemical Agents)	
Canada. Ontario OELs. (Control of E	.xposure to biological or o		
Canada. Ontario OELs. (Control of E Components	Type	Value	Form
		Value 2 mg/m3	Form Respirable fraction.

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Components	Туре	Value	Form
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Canada. Quebec OELs. (Mir Components	nistry of Labor - Regulation respecting Type	occupational health and sa Value	ifety) Form
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable dust.
SILICA, AMORPHOUS, FUMED (CAS 61790-53-2)	TWA	6 mg/m3	Total dust.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.
Canada. Saskatchewan OEL Components	s (Occupational Health and Safety Re. Type	egulations, 1996, Table 21) Value	Form
Kaolin (CAS 1332-58-7)	15 minute	4 mg/m3	Respirable fraction.
	8 hour	2 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	15 minute	20 mg/m3	Dust.
	8 hour	10 mg/m3	Dust.
SILICA, AMORPHOUS, FUMED (CAS 61790-53-2)	15 minute	6 mg/m3	Respirable fraction.
		20 mg/m3	Inhalable fraction.
	8 hour	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	15 minute	10 mg/m3	Inhalable fraction.
	8 hour	0.05 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	8 hour	0.05 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
ogical limit values	No biological exposure limits noted for	• , ,	
osure 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.		
ropriate engineering trols	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.		
vidual protection measures, Eye/face protection	such as personal protective equipme If contact is likely, safety glasses with s		d.
Skin protection			
Hand protection	Wear appropriate chemical resistant g	loves.	

Hand protection Wear appropriate chemical resistant gloves. Use of an impervious apron is recommended. Other

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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

Flash point

Evaporation rate

Not available.

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure
Not available.
Vapor density
Not available.
Relative density
Not available.

Solubility(ies)

Solubility (water)Not available.Partition coefficientNot available.

(n-octanol/water)

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

Other information

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

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoidContact with incompatible materials.

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Strong oxidizing agents. Incompatible materials

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.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

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

irritation

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

SILICA, CRYSTALLINE, CRISTOBALITE (CAS Irritant

14464-46-1)

Titanium Dioxide (CAS 13463-67-7) Irritant

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

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

A2 Suspected human carcinogen.

Suspected human carcinogen.

Suspected human carcinogen.

A4 Not classifiable as a human carcinogen.

in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer

respirable crystalline silica should be monitored and controlled.

ACGIH Carcinogens

Kaolin (CAS 1332-58-7) A4 Not classifiable as a human carcinogen. Mullite (CAS 1302-93-8) A4 Not classifiable as a human carcinogen.

SILICA, CRYSTALLINE, CRISTOBALITE (CAS A2 Suspected human carcinogen.

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Titanium Dioxide (CAS 13463-67-7)

Canada - Alberta OELs: Carcinogen category

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

Canada - Manitoba OELs: carcinogenicity

Not classifiable as a human carcinogen.

Kaolin (CAS 1332-58-7) Mullite (CAS 1302-93-8) Not classifiable as a human carcinogen. SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected human carcinogen.

Titanium Dioxide (CAS 13463-67-7) Not classifiable as a human carcinogen.

Canada - Quebec OELs: Carcinogen category

Detected carcinogenic effect in animals.

Suspected human carcinogen.

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

SILICA, AMORPHOUS, FUMED (CAS 61790-53-2) SILICA, CRYSTALLINE, CRISTOBALITE (CAS

1 Carcinogenic to humans.

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

1 Carcinogenic to humans.

Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

Known To Be Human Carcinogen.

14464-46-1)

Reasonably Anticipated to be a Human Carcinogen.

3 Not classifiable as to carcinogenicity to humans.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

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

Developmental effects

SILICA, CRYSTALLINE, QUARTZ **Developmental effects - EU category** SILICA, CRYSTALLINE, QUARTZ

Embryotoxicity

SILICA, CRYSTALLINE, QUARTZ 0

Reproductivity

SILICA, CRYSTALLINE, QUARTZ 0

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

Causes damage to organs through prolonged or repeated exposure.

repeated exposure

Not an aspiration hazard. **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

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

Bioaccumulative potential No data available. No data available. Mobility in soil

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.

Since this product is used in several industries, no Waste Code can be provided by the supplier. Hazardous waste code

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

TDG

Not regulated as dangerous goods.

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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

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name Or	inventory (yes/no)*	
Australia	Australian Inventory of Chemical Substances (AICS)	Yes	
Canada	Domestic Substances List (DSL)	No	
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 "Voc" indicates that all components of this product comply with the inventory requirements administered by the governing country(a)			

^{*}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

 Issue date
 04-17-2019

 Revision date
 12-01-2022

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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.

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