SAFETY DATA SHEET



1. Identification

Product identifier KAST-O-LITE 30 LI PLUS

Other means of identification

Brand Code 5874

Recommended use For Industrial Use Only

Recommended restrictions Avoid dry cutting, blasting, or dust generation.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township Pennsylvania 15108 US

Telephone General Phone: 412-375-6600

Websitewww.thinkHWl.comEmergency phone numberNot available.SupplierNot 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 in a manner to minimize airborne dust.

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	%
Kyanite		1302-76-7	20 - 40
ALPHA-ALUMINA		1344-28-1	10 - 25
Cement, Alumina, Chemicals		65997-16-2	10 - 25

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

Chemical name	Common name and synonyms	CAS number	%
Mullite		1302-93-8	2.5 - 10
SILICA, CRYSTALLINE, CRISTOBALITE		14464-46-1	2.5 - 10
SILICA, CRYSTALLINE, QUARTZ		14808-60-7	2.5 - 10
SILICA, AMORPHOUS, FUMED	Fumed Silica Silica, crystalline free	7631-86-9	1 - 2.5
Titanium Dioxide		13463-67-7	1 - 2.5
Other components below reportable	e levels		10 - 25

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.

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. Eve contact

Rinse mouth. Get medical attention if symptoms occur. Ingestion

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

Methods and materials for containment and cleaning up 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.

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).

Material name: KAST-O-LITE 30 LI PLUS 5874 Version #: 01 Issue date: 08-28-2019

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values	;		
Components	Туре	Value	Form
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
(CAS 1302-76-7)	TWA	1 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.
itanium Dioxide (CAS 3463-67-7)	TWA	10 mg/m3	
Canada. Alberta OELs (Occupation	nal Health & Safety Code, Sch	nedule 1, Table 2)	
Components	Туре	Value	Form
ALPHA-ALUMINA (CAS 344-28-1)	TWA	10 mg/m3	
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 4464-46-1)	TWA	0.025 mg/m3	Respirable.
		0.025 mg/m3	Respirable particles.
ILICA, CRYSTALLINE, UARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
itanium Dioxide (CAS 3463-67-7)	TWA	10 mg/m3	
Canada. British Columbia OELs. (0	Occupational Exposure Limits	s for Chemical Substances, Oc	cupational Health and
Safety Regulation 296/97, as amen	-	M.I.	F
omponents	Туре	Value	Form
LPHA-ALUMINA (CAS 344-28-1)	TWA	1 mg/m3	Respirable.
yanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable.
Iullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable.
ILICA, AMORPHOUS, UMED (CAS 7631-86-9)	TWA	4 mg/m3	Total
		1.5 mg/m3	Respirable.
GILICA, CRYSTALLINE, CRISTOBALITE (CAS 4464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE,	TWA	0.025 mg/m3	Respirable fraction.
QUARTZ (CAS 14808-60-7) Titanium Dioxide (CAS 3463-67-7)	TWA	3 mg/m3	Respirable fraction.
QUARTZ (CAS 14808-60-7) itanium Dioxide (CAS	TWA	3 mg/m3 10 mg/m3	Respirable fraction. Total dust.
UARTZ (CAS 14808-60-7) itanium Dioxide (CAS 3463-67-7)		10 mg/m3	·
QUARTZ (CAS 14808-60-7) itanium Dioxide (CAS 3463-67-7) canada. Manitoba OELs (Reg. 217		10 mg/m3	·
QUARTZ (CAS 14808-60-7) itanium Dioxide (CAS 3463-67-7) canada. Manitoba OELs (Reg. 217) components LPHA-ALUMINA (CAS	/2006, The Workplace Safety	10 mg/m3 And Health Act)	Total dust.
QUARTZ (CAS 14808-60-7) itanium Dioxide (CAS 3463-67-7) canada. Manitoba OELs (Reg. 217.components LPHA-ALUMINA (CAS 344-28-1)	/2006, The Workplace Safety / Type	10 mg/m3 And Health Act) Value	Total dust.
QUARTZ (CAS 14808-60-7) itanium Dioxide (CAS	/2006, The Workplace Safety / Type TWA	10 mg/m3 And Health Act) Value 1 mg/m3	Total dust. Form Respirable fraction.

Material name: KAST-O-LITE 30 LI PLUS 5874 Version #: 01 Issue date: 08-28-2019

14464-46-1)

	Туре		
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. Ontario OELs. (Con Components	trol of Exposure to Biological or Che Type	mical Agents) Value	Form
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
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. (Min Components	istry of Labor - Regulation respecting Type	g occupational health and sa Value	fety) Form
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	10 mg/m3	Total dust.
SILICA, AMORPHOUS, FUMED (CAS 7631-86-9)	TWA	6 mg/m3	Respirable 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 Ro Type	egulations, 1996, Table 21) Value	Form
ALPHA-ALUMINA (CAS			
1344-28-1)	15 minute	20 mg/m3	
·	8 hour	10 mg/m3	
Kyanite (CAS 1302-76-7)	15 minute	20 mg/m3	Dust.
	8 hour	10 mg/m3	Dust.
Mullite (CAS 1302-93-8)	15 minute	20 mg/m3	Dust.
·	8 hour	10 mg/m3	Dust.
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	the ingredient(s).	
osure guidelines	Occupational exposure to nuisance du should be monitored and controlled. C and respirable crystalline silica should	ust (total and respirable) and re occupational exposure to nuisal	

Material name: KAST-O-LITE 30 LI PLUS 5874 Version #: 01 Issue date: 08-28-2019

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.

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 Suitable gloves can be recommended by the glove supplier.

Other Use of an impervious apron is recommended.

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 Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

(/0)

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.
Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not 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 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.

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

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.

Germ cell mutagenicityNo 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

respirable crystalline silica should be monitored and controlled.

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

ACGIH Carcinogens

ALPHA-ALUMINA (CAS 1344-28-1)

Kyanite (CAS 1302-76-7)

Mullite (CAS 1302-93-8)

A4 Not classifiable as a human carcinogen.

A4 Not classifiable as a human carcinogen.

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)

A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

SILICA, CRYSTALLINE, CRISTOBALITE (CAS Suspected human carcinogen.

14464-46-1)

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

Canada - Manitoba OELs: carcinogenicity

ALPHA-ALUMINA (CAS 1344-28-1)

Kyanite (CAS 1302-76-7)

Mullite (CAS 1302-93-8)

Not classifiable as a human carcinogen.

Not classifiable as a human carcinogen.

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

SILICA, CRYSTALLINE, CRISTOBALITE (CAS Detected carcinogenic effect in animals.

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 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

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.

A2 Suspected human carcinogen.

Suspected human carcinogen.

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

Reproductive toxicityThis 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

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

0

Aspiration hazard Not an aspiration hazard.

SILICA, CRYSTALLINE, QUARTZ

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

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 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 instructionsThis 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.

Material name: KAST-O-LITE 30 LI PLUS 5874 Version #: 01 Issue date: 08-28-2019

Hazardous waste codeSince 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

Contaminated packaging

Not available.

Not available.

14. Transport information

TDG

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

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	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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 08-28-2019

Version # 01

This information is based on our present knowledge on creation date. However, this shall not Disclaimer

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

Product and Company Identification: Product Codes **Revision information**

Composition / Information on Ingredients: Ingredients

Material name: KAST-O-LITE 30 LI PLUS SDS CANADA 5874 Version #: 01 Issue date: 08-28-2019 9/9