

SAFETY DATA SHEET

1. Identification

Product identifier	ON-LINE 60	
Other means of identification		
Brand Code	0483	
Recommended use	For Industrial or Professional Use Only	
Recommended restrictions	Avoid dry cutting, blasting, or dust generation.	
Manufacturer/Importer/Supplier/I	Distributor information	
Manufacturer		
Company name	HarbisonWalker International	
Address	1305 Cherrington Parkway, Suite 100	
	Moon Township, Pennsylvania 15108 US	
Telephone	General Phone: 412-375-6600	
Website	www.thinkHWI.com	
Emergency phone number	Not available.	

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Carcinogenicity
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	



Signal word Danger Hazard statement May cause cancer. **Precautionary statement** Obtain special instructions before use. Do not handle until all safety precautions have been read Prevention and understood. Wear protective gloves/protective clothing/eye protection/face protection. Response If exposed or concerned: Get medical advice/attention. Store in a manner to minimize airborne dust. Storage Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. Hazard(s) not otherwise None known. classified (HNOC) Supplemental information None.

Category 1A

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Mullite		1302-93-8	60 - 80
Amorphous Silica	Fumed Silica Silica, crystalline free	7631-86-9	10 - 25
Aluminium Oxide (Non-Fibrous)		1344-28-1	2.5 - 10
Cement, Alumina, Chemicals		65997-16-2	2.5 - 10
Fumes, Silica		69012-64-2	2.5 - 10
Titanium Dioxide		13463-67-7	1 - 2.5
Carbon		7440-44-0	< 0.5

Chemical name	Common name and synonyms	CAS number	%
Cristobalite		14464-46-1	< 0.5
Other components below r	eportable levels		2.5 - 10

Other components below reportable levels

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.
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	Direct contact with eyes may cause temporary irritation.
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. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
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. 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. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Conditions for safe storage, Section 10 of the SDS). including any incompatibilities

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.

Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cristobalite (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.

Components	for Air Contaminants (29 CFR 1910.1000) Type	Value	Form
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
US. OSHA Table Z-3 (29 CF	R 1910.1000)		
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Amorphous Silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
Carbon (CAS 7440-44-0)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable.
		1.2 mppcf	Respirable.
Fumes, Silica (CAS 69012-64-2)	TWA	0.8 mg/m3	
		20 mppcf	
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limi Components	t Values Type	Value	Form
Aluminium Oxide	TWA	1 mg/m3	Respirable fraction.
(Non-Fibrous) (CAS 1344-28-1)			
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
US. NIOSH: Pocket Guide t Components	o Chemical Hazards Type	Value	Form
- Amorphous Silica (CAS 7631-86-9)	TWA	6 mg/m3	
Carbon (CAS 7440-44-0)	TWA	2.5 mg/m3	Respirable.
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TWA	6 mg/m3	
ogical limit values	No biological exposure limits noted for the ing	redient(s).	
osure guidelines	Occupational exposure to nuisance dust (total should be monitored and controlled.	and respirable) and re	spirable crystalline silica
ropriate engineering trols	Good general ventilation (typically 10 air chan should be matched to conditions. If applicable or other engineering controls to maintain airbo exposure limits have not been established, ma	, use process enclosur orne levels below recon	es, local exhaust ventilat nmended exposure limits

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Wear appropriate thermal protective clothing, when necessary.

Skin protection

Hand protection

Other

Wear appropriate chemical resistant gloves.

exceeding the exposure limits.

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels

Respiratory protection

Thermal hazards



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.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	osive 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 coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

The 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	Chlorine. Fluorine. 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.	
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Information on toxicological effects

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Acute toxicity	Not known.			
Skin corrosion/irritation	Prolonged skin contact may c	Prolonged skin contact may cause temporary irritation.		
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.			
Respiratory or skin sensitization	1			
Respiratory sensitization	Not a respiratory sensitizer.			
Skin sensitization	This product is not expected to cause skin sensitization.			
Germ cell mutagenicity	No data available to indicate p mutagenic or genotoxic.	No data available to indicate product or any components present at greater than 0.1% are		
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 7 Cristobalite (CAS 14464- Fumes, Silica (CAS 6901 Titanium Dioxide (CAS 13 OSHA Specifically Regulate	46-1) 2-64-2)	 3 Not classifiable as to carcinogenicity to humans. 1 Carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans. 001-1052) 		
Cristobalite (CAS 14464-46-1)		Cancer		
US. National Toxicology Program (NTP) Report on Carcinogens		ogens		
Cristobalite (CAS 14464-	46-1)	Known To Be Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen.		
Reproductive toxicity	This product is not expected to	o cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	Not classified.			

Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	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.

ΙΑΤΑ

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 CodeNot 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)

Cristobalite (CAS 14464-46-1)

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 Yes chemical Classified hazard Carcinogenicity categories

SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.	
Aluminium Oxide (Nor	-Fibrous)	1344-28-1	2.5 - 10	
Other federal regulations				
Clean Air Act (CAA) Sect	ion 112 Hazardous Air	Pollutants (HAPs) List		
Not regulated. Clean Air Act (CAA) Sect	ion 112(r) Accidental I	Release Prevention (40 C	FR 68.130)	
Not regulated.				
Safe Drinking Water Act (SDWA)	Not regulated.			
US state regulations				
California Proposition 65				
			ng Titanium Dioxide, which is knov n go to www.P65Warnings.ca.gov	
California Propositio	n 65 - CRT: Listed dat	e/Carcinogenic substanc	е	
	(CAS 13463-67-7)	Listed: Octob Listed: Septer Safer Consumer Products		it. 22, 69502.3,
Cristobalite (CAS Titanium Dioxide	14464-46-1) (CAS 13463-67-7)			
International Inventories				
Country(s) or region	Inventory name		On i	inventory (yes/no)*
Australia	Australian Inventor	ry of Chemical Substances	(AICS)	No
Canada	Domestic Substan	ces List (DSL)		No
Canada	Non-Domestic Sub	ostances List (NDSL)		No
China	Inventory of Existir	ng Chemical Substances in	China (IECSC)	No
Europe	European Inventor Substances (EINE	y of Existing Commercial C CS)	Chemical	No
Europe	European List of N	lotified Chemical Substance	es (ELINCS)	No
Japan	Inventory of Existir	ng and New Chemical Subs	stances (ENCS)	No
Korea	Existing Chemicals	s List (ECL)		No
New Zealand	New Zealand Inve	ntory		No
Philippines	Philippine Inventor (PICCS)	y of Chemicals and Chemi	cal Substances	No
Taiwan	Taiwan Chemical	Substance Inventory (TCSI)	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, including date of preparation or last revision

Issue date	05-22-2015
Version #	01
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.

No