SAFETY DATA SHEET



1. Identification

Product identifier GREENLITE 75-28 PLUS; GREENLITE 75-28 PLUS WF

Other means of identification

Brand Code 5934, 5935

Recommended use For Industrial Use Only

Recommended restrictionsUsers 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

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 CHEMTREC 24 HOUR 1-800-424-9300

EMERGENCY #

Supplier Not available.

2. Hazard(s) 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 Not available.

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 nameCommon name and synonymsCAS number%Cement, Alumina, Chemicals65997-16-210 - 20

Material name: GREENLITE 75-28 PLUS; GREENLITE 75-28 PLUS WF 5934, 5935 Version #: 01 Issue date: 03-06-2018

Chemical name	Common name and synonyms	CAS number	%
SILICA, CRYSTALLINE, QUARTZ		14808-60-7	10 - 20
ALPHA-ALUMINA		1344-28-1	2.5 - 10
Titanium Dioxide		13463-67-7	1 - 2.5
Bentonite		1302-78-9	0.1 - 1
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
General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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)

involved, and take precautions to protect themselves.

Use fire-extinguishing media appropriate for surrounding materials.

5. Fire-fighting measures

Suitable extinguishing media

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. Material can be slippery when wet. 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.

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

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. 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 locked up. Store in original 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
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Components	Туре	Value	Form	
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 (Occ Components	upational Health & Safety Code, Sch Type	nedule 1, Table 2) Value	Form	
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	10 mg/m3		
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 O Safety Regulation 296/97, as	ELs. (Occupational Exposure Limits amended)	s for Chemical Substances, Oc	cupational Health and	
Components	Туре	Value	Form	
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	1 mg/m3	Respirable.	
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 (Re Components	eg. 217/2006, The Workplace Safety Type	And Health Act) Value	Form	
ALPHA-ALUMINA (CAS	TWA	1 mg/m3	Respirable fraction.	
1344-28-1) SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3		
•	ntrol of Exposure to Biological or Ch Type	nemical Agents) Value	Form	
ALPHA-ALUMINA (CAS	TWA	1 mg/m3	Respirable fraction.	
1344-28-1)		•	•	
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	istry of Labor - Regulation Respect Type	ing the Quality of the Work En Value	vironment) Form	
ALPHA-ALUMINA (CAS	TWA	10 mg/m3	Total dust.	
1344-28-1) SILICA, CRYSTALLINE, OLIARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.	
QUARTZ (CAS 14808-60-7) Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.	
logical limit values	No biological exposure limits noted f	or the ingredient(s).		
osure guidelines	Occupational exposure to nuisance should be monitored and controlled. and respirable crystalline silica shou	Occupational exposure to nuisa		
propriate engineering trols	should be matched to conditions. If a or other engineering controls to mair	sood general ventilation (typically 10 air changes per hour) should be used. Ventilation rates hould be matched to conditions. If applicable, use process enclosures, local exhaust ventilatior rother engineering controls to maintain airborne levels below recommended exposure limits. If xposure 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 Wear appropriate chemical resistant gloves.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

Evaporation rate

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. Not available.

Explosive limit - upper (%)Not available.Vapor pressureNot available.Vapor densityNot available.Relative densityNot 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 contactNo adverse effects due to skin contact are expected.Eye contactDirect 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. **Serious eye damage/eye** Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

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

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.

ACGIH Carcinogens

ALPHA-ALUMINA (CAS 1344-28-1)

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

Titanium Dioxide (CAS 13463-67-7)

Canada - Alberta OELs: Carcinogen category

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

Canada - Manitoba OELs: carcinogenicity

ALPHA-ALUMINA (CAS 1344-28-1)

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

Titanium Dioxide (CAS 13463-67-7)

Canada - Quebec OELs: Carcinogen category

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

A4 Not classifiable as a human carcinogen.

A2 Suspected human carcinogen.

A4 Not classifiable as a human carcinogen.

Suspected human carcinogen.

Not classifiable as a human carcinogen.

Suspected human carcinogen.

Not classifiable as a human carcinogen.

Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

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, 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

0 SILICA, CRYSTALLINE, QUARTZ

Developmental effects - EU category

SILICA, CRYSTALLINE, QUARTZ 0

Embryotoxicity

SILICA, CRYSTALLINE, QUARTZ 0

Reproductivity

0 SILICA, CRYSTALLINE, QUARTZ

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**

Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be **Chronic effects**

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 this product. Persistence and degradability

No data available. Bioaccumulative potential 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.

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.

Not available. Contaminated packaging

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

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.

Country(s) or region

International Inventories

Australia

, , , , , , , , , , , , , , , , , , , ,	ride and in the first of the fi	
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

Australian Inventory of Chemical Substances (AICS)

16. Other information

Issue date 03-06-2018

Version # 01

United States & Puerto Rico

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

Toxic Substances Control Act (TSCA) Inventory

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

contractual relationship.

Revision information Product and Company Identification: Product Codes

Inventory name

On inventory (yes/no)*

No

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).