SAFETY DATA SHEET



1. Identification

Product identifier GREENCAST-94 PLUS; GREENCAST-94 PLUS WF

Other means of identification

Brand Code 5477, 5479, 058A, 247A, 387C

Recommended use For Industrial Use Only

Recommended restrictions None known.

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 Not classified.
Environmental hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ALPHA-ALUMINA		1344-28-1	80 - 90
Cement, Alumina, Chemicals		65997-16-2	10 - 20
Other components below reporta	ble levels		0.1 - 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

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

Skin contactWash off with soap and water. Get medical attention if irritation develops and persists.Eye contactDo not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

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Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

General information

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special Treat symptomatically.

treatment needed

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.

Dusts may irritate the respiratory tract, skin and eyes.

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. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. For

waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground. **Environmental precautions**

7. Handling and storage

Precautions for safe handling Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places

where dust is formed. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store in a well-ventilated place. 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.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) Components **Type** Value

ALPHA-ALUMINA (CAS TWA 10 mg/m3 1344-28-1)

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Туре	Value	Form
ALPHA-ALUMINA (CAS 1344-28-1)	TWA	1 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Form Components Value Type ALPHA-ALUMINA (CAS **TWA** Respirable fraction. 1 mg/m3 1344-28-1)

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Form Components Value Type ALPHA-ALUMINA (CAS TWA 1 mg/m3 Respirable fraction.

1344-28-1)

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) **Form** Components **Type** Value ALPHA-ALUMINA (CAS **TWA** 10 mg/m3 Total dust.

1344-28-1)

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Appropriate engineering controls

If material is ground, cut, or used in any operation which may generate dusts, use appropriate local

exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels Respiratory protection

exceeding the exposure limits.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards







General hygiene considerations

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

Solid. Physical state Powder. **Form** Color Not available. Odor Not available. Not available. **Odor threshold** Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Flash point Not available. Not available. **Evaporation rate** Not available. Flammability (solid, gas) 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.

Not available. Vapor density Not available. Relative density

Solubility(ies)

Not available. Solubility (water)

Partition coefficient (n-octanol/water)

Not available.

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

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

10. Stability and reactivity

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

Conditions to avoid

reactions

No dangerous reaction known under conditions of normal use.

Incompatible materials Acids. Chlorine.

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

not be specific to industrial application exposure.

Contact with incompatible materials.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Skin contact Dust or powder may irritate the skin.

Dust may irritate the eyes. Eye contact

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Not known.

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

irritation

Direct contact with eyes may cause temporary 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.

Carcinogenicity

ACGIH Carcinogens

ALPHA-ALUMINA (CAS 1344-28-1) A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

ALPHA-ALUMINA (CAS 1344-28-1) Not classifiable as a human carcinogen.

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

Not classified.

Aspiration hazard Not an aspiration hazard.

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. 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 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.

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

Not available.

Contaminated packaging

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

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)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region Inventory name On inventory (yes/no)* European Inventory of Existing Commercial Chemical Europe

Substances (EINECS)

Europe European List of Notified Chemical Substances (ELINCS) No Inventory of Existing and New Chemical Substances (ENCS) Japan No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

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

Yes

16. Other information

Issue date 04-10-2018

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.

Revision information Product and Company Identification: Product Codes

^{*}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).