



SAFETY DATA SHEET

1. Identification

Material name: STREETBOND SP-50 HARDENER

Manufacturer/Importer/Supplier/Distributor Information

Company name GAF
1 Campus Drive
Parsippany, NJ 07054 USA

Telephone 1-800-766-3411

Emergency phone number CHEMTREC [DAY OR NIGHT] 1-800-424-9300
Within USA and CANADA 1-800-424-9300
Outside USA and Canada: 1 703-741-5970

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral) Category 4

Carcinogenicity Category 1A

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Harmful if swallowed.
May cause cancer.

Precautionary Statement: Prevention: Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. If exposed or concerned: Get medical advice/attention. Specific treatment (see this label). Wash



SAFETY DATA SHEET

Storage: Store locked up. Store in original tightly closed container.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	40 - 70%
Granulated blast-furnace slag	65996-69-2	30 - 60%
Calcium oxide	1305-78-8	5 - 10%
Aluminum oxide	1344-28-1	1 - 5%
Amorphous silica	7631-86-9	1 - 5%
Sulphur trioxide	7446-11-9	1 - 5%
Portland cement	65997-15-1	0.1 - 1%
Magnesium oxide	1309-48-4	0.1 - 1%

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

4. First-aid measures

Ingestion: Call a POISON CENTER if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.



SAFETY DATA SHEET

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

Conditions for safe storage, including any incompatibilities: Store locked up in original container.



SAFETY DATA SHEET

8. Exposure controls/personal protection

Control Parameters Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m ³	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.1 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Crystalline Silica (Quartz)/ Silica Sand - Total dust.	TWA	0.3 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Calcium oxide	TWA	2 mg/m ³	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Respirable fraction.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Amorphous silica	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.8 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Portland cement - Respirable fraction.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values (2011)
Portland cement - Total	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air
Portland cement -	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air
Portland cement	TWA	50 millions of particles per	US. OSHA Table Z-3 (29 CFR
Magnesium oxide -	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values
Magnesium oxide - Total	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air
Chemical name	type	Exposure Limit Values	Source
Crystalline Silica	TWA	0.025	Canada. British Columbia OELs.
Crystalline Silica	TWAEV	0.10	Canada. Ontario OELs. (Control of
Crystalline Silica	TWA	0.1 mg/m ³	Canada. Quebec OELs. (Ministry of
Calcium oxide	TWA	2 mg/m ³	Canada. British Columbia OELs.
Calcium oxide	TWAEV	2 mg/m ³	Canada. Ontario OELs. (Control of



SAFETY DATA SHEET

Calcium oxide	TWA	2 mg/m ³	Canada. Quebec OELs. (Ministry of
Aluminum oxide -	TWA	1 mg/m ³	Canada. British Columbia OELs.
Aluminum oxide -	TWAEV	1 mg/m ³	Canada. Ontario OELs. (Control of
Aluminum oxide - Total	TWA	10 mg/m ³	Canada. Quebec OELs. (Ministry of
Amorphous silica - Total	TWA	4 mg/m ³	Canada. British Columbia OELs.
Amorphous silica -	TWA	1.5 mg/m ³	Canada. British Columbia OELs.
Amorphous silica	TWAEV	10 mg/m ³	Canada. Ontario OELs. (Control of
Amorphous silica -	TWA	6 mg/m ³	Canada. Quebec OELs. (Ministry of
			2008)
Sulphur trioxide - Mist.	TWA	0.2 mg/m ³	Canada. British Columbia OELs.

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear safety glasses/goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after handling. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Appearance

Physical state: Solid

Form: Powder

Color: Gray

Odor: Odorless

Odor threshold: No data available.

pH: 10 - 13

Melting point/freezing point: No data available.

Initial boiling point and boiling range: > 1,482 °C > 2,700 °F

Flash Point: No data available.

Evaporation rate: No data available.



SAFETY DATA SHEET

Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	3.00
Solubility(ies)	
Solubility in water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Dermal Product:	ATEmix: 4,662.6 mg/kg
Inhalation Product:	No data available.
Specified substance(s):	
Granulated blast-furnace slag	LC 0 (Rat, 4 h): $\geq 5,235$ mg/m ³
Calcium oxide	LC 50 (Rat, 4 h): 160 mg/m ³ LC 50 (Rat, 4 h): 40 mg/m ³ LC 50 (Rat, 1 h): 1,026 mg/m ³
Aluminum oxide	NOAEL (Rat, 4 h): 10 mg/m ³



SAFETY DATA SHEET

Amorphous silica LC 50 (Rat, 4 h): > 58.8 mg/l

Sulphur trioxide
LC 0): 0.461 mg/l
LC 0): 0.699 mg/l
LC 100): 1.47 mg/l
LC 100): 0.087 mg/l
LC 100): 0.699 mg/l
LC 40): 0.699 mg/l
LC 0): 0.718 mg/l
LC 50): 1.61 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Granulated blast-furnace slag in vivo (Rabbit, 24 hrs): Not irritating
Calcium oxide in vivo (Rabbit, 1 hrs): Irritating
Aluminum oxide in vivo (Rabbit, 24 hrs): Not irritating
Amorphous silica in vivo (Rabbit, 24 hrs): Not irritating
Sulphur trioxide Highly irritating
Magnesium oxide Slightly irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Crystalline Silica (Quartz)/ Silica Sand Overall evaluation: Carcinogenic to humans.

Sulphur trioxide Overall evaluation: Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

Crystalline Silica (Quartz)/ Silica Sand Known To Be Human Carcinogen.

Sulphur trioxide Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified



SAFETY DATA SHEET

Germ Cell Mutagenicity In

vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment: Fish

Aquatic Invertebrates

Product: No data available.
Product: No data available.

Chronic hazards to the aquatic environment: Fish

Specified substance(s):

Product: No data available.
Calcium oxide NOAEL (Oncorhynchus mykiss, 60 d): 307 mg/l interpreted
Aluminum oxide NOAEL (Pimephales promelas, 28 d): 4.7 mg/l experimental result
Sulphur trioxide NOAEL (Jordanella floridae, 65 d): 0.025 mg/l interpreted

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.



SAFETY DATA SHEET

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

IATA:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Sulphur trioxide	1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories



SAFETY DATA SHEET

Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Sulphur trioxide	100 lbs.	100 lbs.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Sulphur trioxide	1000 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Sulphur trioxide	100lbs
Crystalline Silica (Quartz)/ Silica Sand	500 lbs
Granulated blast-furnace slag	500 lbs
Calcium oxide	500 lbs
Aluminum oxide	500 lbs
Amorphous silica	500 lbs
Portland cement	500 lbs
Magnesium oxide	500 lbs

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>
Aluminum oxide

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Sulphur trioxide	10000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

<u>Chemical Identity</u>
Crystalline Silica (Quartz)/ Silica Sand
Calcium oxide
Aluminum oxide
Amorphous silica
Sulphur trioxide

US. Massachusetts RTK - Substance List

<u>Chemical Identity</u>



SAFETY DATA SHEET

Crystalline Silica (Quartz)/ Silica Sand
Calcium oxide
Aluminum oxide
Amorphous silica
Sulphur trioxide

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Crystalline Silica (Quartz)/ Silica Sand
Calcium oxide
Aluminum oxide
Amorphous silica
Sulphur trioxide

US. Rhode Island RTK

Chemical Identity

Aluminum oxide
Sulphur trioxide

Other Regulations:

Regulatory VOC (less water and exempt solvent):	0 g/l
VOC Method 310:	0.00 %

Inventory Status:

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.



SAFETY DATA SHEET

Japan Pharmacopoeia Listing:

One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision

Issue date	09-29-2015
Revision date	04-15-2016
Version #	02
HMIS® ratings	Health: 1* Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 0 Flammability: 0 Instability: 0
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Revision Information	Product and Company Identification: Converted to GAF SDS