

SAFETY DATA SHEET



1. Identification

Product identifier STREETBOND COLORANT PATRIOT BLUE

Other means of identification

Product Code

Recommended use Colorant.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

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

Physical hazards Not classified.

Health hazards Carcinogenicity Category 2

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Suspected of causing cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Titanium Dioxide		13463-67-7	40 to <50

Chemical name	Common name and synonyms	CAS number	%
Carbon Black		1333-86-4	5 to <10
Propylene Glycol		57-55-6	5 to <10
Copper Phthalocyanine		147-14-8	1 to <5
ETHYLENE GLYCOL		107-21-1	1 to <5
Silicate		14807-96-6	1 to <5
PARAFFINIC PETROLEUM OIL		64742-54-7	0.1 to <1
TRIBUTYL PHOSPHATE		126-73-8	0.1 to <1
Other components below reportable levels			30 to <40

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	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
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	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p>
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. 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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m ³	
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m ³	Total dust.
TRIBUTYL PHOSPHATE (CAS 126-73-8)	PEL	5 mg/m ³	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Silicate (CAS 14807-96-6)	TWA	0.3 mg/m ³	Total dust.
		0.1 mg/m ³	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.
ETHYLENE GLYCOL (CAS 107-21-1)	Ceiling	100 mg/m ³	Aerosol.
PARAFFINIC PETROLEUM OIL (CAS 64742-54-7)	TWA	5 mg/m ³	Inhalable fraction.
Silicate (CAS 14807-96-6)	TWA	2 mg/m ³	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	
TRIBUTYL PHOSPHATE (CAS 126-73-8)	TWA	5 mg/m ³	Inhalable fraction and vapor.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	0.1 mg/m ³	
Copper Phthalocyanine (CAS 147-14-8)	TWA	1 mg/m ³	Dust and mist.
Silicate (CAS 14807-96-6)	TWA	2 mg/m ³	Respirable.
TRIBUTYL PHOSPHATE (CAS 126-73-8)	TWA	2.5 mg/m ³	
		0.2 ppm	

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Propylene Glycol (CAS 57-55-6)	TWA	10 mg/m ³	Aerosol.

Biological limit values

No biological exposure limits noted for the ingredient(s).

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	For prolonged or repeated skin contact use suitable protective gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
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

Physical state	Liquid.
Form	Liquid.
Color	Blue.
Odor	Not available.
Odor threshold	Not available.
pH	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 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.
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	
Density	13.59 lbs/gal
Flammability class	Not available.
Percent volatile	57.98 %
Specific gravity	1.63
VOC	1.743963 lbs/gal Regulatory estimated 110.216518 g/l Material estimated 0.919774 lbs/gal Material estimated 208.979086 g/l Regulatory estimated

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 reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
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

Components	Species	Test Results
Carbon Black (CAS 1333-86-4)		
<u>Acute</u>		
Oral		
LD50	Rat	> 8000 mg/kg
ETHYLENE GLYCOL (CAS 107-21-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	9530 mg/kg
Oral		
LD50	Guinea pig	8.2 g/kg
	Mouse	14.6 g/kg
	Rat	5.89 g/kg
Propylene Glycol (CAS 57-55-6)		
<u>Acute</u>		
Oral		
LD50	Guinea pig	18.4 g/kg
	Mouse	23.9 g/kg
	Rabbit	18 g/kg
	Rat	30 g/kg
TRIBUTYL PHOSPHATE (CAS 126-73-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 3100 mg/kg
Inhalation		
LC50	Rat	123 mg/l, 6 Hours
Oral		
LD50	Hen	1863 mg/kg
	Mouse	1189 mg/kg
	Rat	3 g/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

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

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
 Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

PARAFFINIC PETROLEUM OIL (CAS 64742-54-7) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not available.

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.

Components	Species	Test Results
ETHYLENE GLYCOL (CAS 107-21-1)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours
Propylene Glycol (CAS 57-55-6)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 710 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 mg/l, 96 hours
TRIBUTYL PHOSPHATE (CAS 126-73-8)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 1 - 10 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ETHYLENE GLYCOL -1.36
 Propylene Glycol -0.92

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	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

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 Code Not established.

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 components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper Phthalocyanine (CAS 147-14-8)	Listed.
ETHYLENE GLYCOL (CAS 107-21-1)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ETHYLENE GLYCOL	107-21-1	1 to <5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

ETHYLENE GLYCOL (CAS 107-21-1)

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Carbon Black (CAS 1333-86-4)
ETHYLENE GLYCOL (CAS 107-21-1)
PARAFFINIC PETROLEUM OIL (CAS 64742-54-7)
Silicate (CAS 14807-96-6)
Titanium Dioxide (CAS 13463-67-7)

US. Massachusetts RTK - Substance List

Carbon Black (CAS 1333-86-4)
ETHYLENE GLYCOL (CAS 107-21-1)
Silicate (CAS 14807-96-6)
Titanium Dioxide (CAS 13463-67-7)
TRIBUTYL PHOSPHATE (CAS 126-73-8)

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

Carbon Black (CAS 1333-86-4)
Copper Phthalocyanine (CAS 147-14-8)
ETHYLENE GLYCOL (CAS 107-21-1)
Propylene Glycol (CAS 57-55-6)
Silicate (CAS 14807-96-6)
Titanium Dioxide (CAS 13463-67-7)
TRIBUTYL PHOSPHATE (CAS 126-73-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Black (CAS 1333-86-4)
ETHYLENE GLYCOL (CAS 107-21-1)
Propylene Glycol (CAS 57-55-6)
Silicate (CAS 14807-96-6)
Titanium Dioxide (CAS 13463-67-7)
TRIBUTYL PHOSPHATE (CAS 126-73-8)

US. Rhode Island RTK

ETHYLENE GLYCOL (CAS 107-21-1)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4)	Listed: February 21, 2003
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

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
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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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 12-04-2014

Material name: STREETBOND COLORANT PATRIOT BLUE
Version #: 05 Revision date: 12-11-2015
SDS 3239

SDS US
8 / 9

Revision date 12-11-2015
Version # 05
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