

Safety Data



1. Identification of Substance:

Product Name: GreenCoat 50
Chemical Family: Water-borne Acrylic Coating
Field of Application: Coating for Roofing Applications
Recommended Use/Restrictions:
 Coating for spray polyurethane foam

Company Details:
Green Shield Products
Address:
 40 Cypress Creek Parkway #338
 Houston, Texas 77090
Telephone:
 1-877-476-7453
 24-Hr. Emergency Response:
 CHEMTREC (800) 424-9300
 INTERNATIONAL: +1-(703) 527-3887

2. Hazards Identification

GHS Classification

Eye irritation: Category 2A
 Skin sensitization: Category 1
 Carcinogenicity: Category 1A

GHS Label Elements

Hazard Pictogram:



Signal Word: Danger

Hazard Statements: May cause an allergic skin reaction.
 Causes serious eye irritation.
 May cause cancer.

Precautionary Statements:

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust, mist, gas, vapors or spray. Wash skin and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear permeation resistant protective gloves and clothing. Wear eye and face protection.

Response:

IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.



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3. Composition/information on ingredients:

Weight Percent	Components	CAS No.	Classification
10 - 20%	Aluminum hydroxide	21645-51-2	Eye irritation Category 2B.
5 - 10%	Titanium dioxide (Rutile)	13463-67-7	Carcinogenicity Category 2 Inhalation. Specific target organ toxicity – single exposure Category 3 Respiratory system.
0.1 - 1%	Biocide	Trade Secret	Acute toxicity Category 2 Inhalation. Serious eye damage Category 1. Skin sensitization Category 1. Carcinogenicity Category 2.
0.1 - 1%	Ammonium Hydroxide	1336-21-6	Acute toxicity Category 4 Oral. Acute toxicity Category 3 Inhalation. Skin corrosion Category 1A. Serious eye damage Category 1.
0.1 - 1%	Crystalline Quartz Silica	14808-60-7	Acute toxicity Category 4 Oral. Carcinogenicity Category 1A. Specific target organ toxicity - repeated exposure Category 1 Lungs.

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures:

Most Important Symptom(s)/Effect(s)

Acute: Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning. May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Eye Contact: In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

Skin Contact: In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. Get medical attention if irritation develops.

Ingestion: If ingested, do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

5. Firefighting measures

Suitable Extinguishing Media: All extinguishing media are suitable.

Unsuitable Extinguishing Media: No Data Available

Fire Fighting Procedure:

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products:

By Thermal Decomposition: carbon monoxide, carbon dioxide, Acrylic monomers, other potentially toxic fumes.

Unusual Fire/Explosion Hazards:

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.



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6. Accidental release measures

Spill and Leak Procedures

Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Clean up with water. Avoid discharge into drains, water courses, or onto the ground.

7. Handling and Storage

Information for Safe Handling: Avoid breathing dust, vapor, or mist. Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Protect from freezing.

Storage Period:

12 Months

Storage Temperature

Minimum: 1 °C (33.8 °F)

Maximum: 49 °C (120.2 °F)

Storage Conditions

None known

Substances to Avoid

None known

8. Exposure Controls and Personal Protection:

Aluminum hydroxide (21645-51-2)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 1 mg/m³ (Respirable fraction.)

US. ACGIH Threshold Limit Values

Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Titanium dioxide (Rutile) (13463-67-7)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 10 mg/m³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Permissible exposure limit: 15 mg/m³ (Total dust.)

US. ACGIH Threshold Limit Values

Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Crystalline Quartz Silica (14808-60-7)

US. ACGIH Threshold Limit Values

Time Weighted Average (TWA): 0.025 mg/m³ (Respirable fraction.)

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

Time Weighted Average (TWA): 2.4 millions of particles per cubic foot of air

(Respirable.) The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using

a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.



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

Time Weighted Average (TWA): 0.1 mg/m³ (Respirable.) The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.

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

Time Weighted Average (TWA): 0.3 mg/m³ (Total dust.) The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO₂. Lower values of % SiO₂ will give higher exposure limits.

US. ACGIH Threshold Limit Values

Hazard Designation: Group A2 Suspected human carcinogen.

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Respiratory Protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand Protection

Permeation resistant gloves.

Eye Protection

Splash proof goggles.

Skin Protection

Wear cloth work clothing including long pants and long-sleeved shirts.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties:

<p>Appearance: Liquid, various colors</p> <p>Vapor Pressure: 17 mmHg @ 20 °C (68 °F) similar to water</p> <p>Vapor Density: N/A</p> <p>Specific Gravity: 1.31</p> <p>Freezing point: 0 °C (32 °F) similar to water</p> <p>Boiling range: 100 °C (212 °F) similar to water</p> <p>Evaporation rate: N/A</p> <p>Explosive Limits: N/A</p> <p>Autoignition temperature: N/A</p>	<p>Odor: Mild, Amine</p> <p>Odor threshold: N/A</p> <p>pH: N/A</p> <p>Melting point: N/A</p> <p>Solubility: N/A</p> <p>Flash point: N/A Flammability: N/A</p> <p>Partition coefficient N/A (n-octanol/water):</p> <p>Decomposition temperature: N/A</p>
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10. Stability and Reactivity:

Hazardous Reactions

Hazardous polymerization does not occur.

Stability

Stable

Materials to Avoid

None known.

Hazardous Decomposition Products

By Thermal Decomposition: carbon monoxide, carbon dioxide, Acrylic monomers, other potentially toxic fumes

11. Toxicological Information:

Likely Routes of Exposure: Skin Contact

Eye Contact

Ingestion

Inhalation

Health Effects and Symptoms

Acute: Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning., May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Chronic: May cause cancer.

Toxicity Data for GREENCOAT SA-40

No data available for this product.

Toxicity Data for Aluminum hydroxide

Acute Oral Toxicity

LD50: > 2000 mg/kg (rat, female) (OECD Test Guideline 423)

Skin Irritation

rabbit, OECD Test Guideline 404, Non-irritating

Eye Irritation

rabbit, OECD Test Guideline 405, Slightly irritating

Sensitization

Respiratory sensitization: negative (mouse)

Studies of a comparable product.

Skin sensitization according to Magnusson/Kligmann (maximizing test):: negative (guinea pig, OECD Test Guideline 406)

Repeated Dose Toxicity

28 Days, Oral: NOAEL: 14,470 ppm, (rat, male)

Mutagenicity

Genetic Toxicity in Vitro:

Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (rat, male/female, Oral) negative



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Developmental Toxicity/Teratogenicity

rat, female, oral, NOAEL (teratogenicity): 1,000 mg/kg, No Teratogenic effects observed at doses tested. No fetotoxicity observed at doses tested. rat, female, oral, GD 6-15, daily, NOAEL (teratogenicity): 266 mg/kg, No Teratogenic effects observed at doses tested. No fetotoxicity observed at doses tested.

Toxicity Data for Titanium dioxide (Rutile)

Acute Oral Toxicity

LD50: > 5000 mg/kg (rat, female) (OECD Test Guideline 425)

Acute Inhalation Toxicity

LC50: > 6.82 mg/l, 4 h (rat, male)

Acute Dermal Toxicity

LD50: > 10000 mg/kg (rabbit)

Skin Irritation

rabbit, OECD Test Guideline 404, Exposure Time: 24 h, Non-irritating

Eye Irritation

rabbit, OECD Test Guideline 405, Non-irritating

Sensitization

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

Skin sensitization (local lymph node assay (LLNA)):: negative (mouse, OECD Test Guideline 429)

Repeated Dose Toxicity

28 Days, inhalation: NOAEL: 35 mg/m³, (Rat)

29 days, Oral: NOAEL: 24,000 mg/kg, (rat, male, daily)

up to 2 years, inhalation: NOAEL: 0.01 mg/l, (Rat, male/female, 6 hrs/day 5 days/week)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with/without)

Chromosome aberration test: negative (Chinese hamster ovary (CHO) cells, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Drosophila SLRL test: negative (Drosophila melanogaster) negative

Cytogenetic assay: negative (mouse, male, intraperitoneal) negative

Carcinogenicity

Rat, Male/Female, inhalation, According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and risk for



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cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."

Other Relevant Toxicity Information

May cause irritation of respiratory tract.

Toxicity Data for 1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro-

Acute Oral Toxicity

LD50: > 10000 mg/kg (rat)

Acute Inhalation Toxicity

LC50: 0.217 mg/l, 4 h (rat) (OECD Test Guideline 403)

Acute Dermal Toxicity

LD50: > 10000 mg/kg (rabbit)

Skin Irritation

rabbit, Draize, Non-irritating

Eye Irritation

severe irritant

Sensitization

Skin sensitization:: sensitizer (Human)

Toxicity Data for Ammonium Hydroxide

Acute Oral Toxicity

LD50: 350 mg/kg (rat)

Acute Inhalation Toxicity

LC50: 2.87 mg/l, 4 h (rat)

Skin Irritation

Corrosive

Eye Irritation

Human, Severely irritating

Sensitization

Skin sensitization: negative

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (E. coli, Metabolic Activation: without)

Toxicity Data for Crystalline Quartz Silica

Acute Oral Toxicity

LD50: 500 mg/kg (rat)



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Mutagenicity

Genetic Toxicity in Vitro:

Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Sister Chromatid Exchange: ambiguous (hamster) ambiguous

Carcinogenicity

rat, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week, positive

Carcinogenicity:

Titanium dioxide (Rutile) **IARC** - Overall evaluation: 2B Possibly carcinogenic to humans.

1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro- **IARC** - Overall evaluation: 2B Possibly carcinogenic to humans.

Crystalline Quartz Silica **NTP** - Hazard Designation: Known To Be Human Carcinogen.
IARC - Overall evaluation: 1 Carcinogenic to humans.

12. Ecological Information:

No data available for this component.

Ecological Data for Titanium dioxide (Rutile)

Acute and Prolonged Toxicity to Fish

LC0: > 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)

Acute Toxicity to Aquatic Invertebrates

EC0: > 3 mg/l (Water flea (Daphnia magna))

Toxicity to Microorganisms

EC0: > 10,000 mg/l, (Pseudomonas fluorescens, 24 h)

Ecological Data for Ammonium Hydroxide

Additional Ecotoxicological Remarks

No data available for this component.



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13. Disposal considerations

Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Container Precautions

Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning.

14. Transport Information

Non-Regulated

15. Regulatory Information:

United States Federal Regulations

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components:

None

SARA Section 311/312 Hazard Categories:

Acute Health Hazard

Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:

1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro-

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
>=1%	Water	7732-18-5
>=1%	Acrylic Polymer	
20 - 30%	Limestone	1317-65-3
10 - 20%	Aluminum hydroxide	21645-51-2
5 - 10%	Titanium dioxide (Rutile)	13463-67-7
0.1 - 1%	Crystalline Quartz Silica	14808-60-7



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California Prop. 65:

Warning! This product contains chemical(s) known to the State of California to be Carcinogenic. Developmental toxin. Female reproductive toxin. Male reproductive toxin.

<u>Weight percent</u>	<u>Components</u>	<u>CAS-No.</u>
5.5 - 10%	Titanium dioxide (Rutile)	13463-67-7
0.1 - 1%	1,3-Benzenedicarbonitrile, 2,4,5,6-tetrachloro-	1897-45-6
0.1 - 1%	Crystalline Quartz Silica	14808-60-7
1.1 - 5 ppm	Cadmium	7440-43-9
5.5 - 10 ppm	Lead	7439-92-1
10 - 15 ppb	Hexachlorobenzene	118-74-1

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information:

Safety Data Sheet issued by Product Safety Department

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Green Shield Products. The data on these sheets relates only to the specific material designated herein. Green Shield Products assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.

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Reviewer Revision 0
Date Prepared: 01/14/2022

SAFETY DATA SHEET



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