

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 16-Jul-2021 Review Date 12-Nov-2025 Revision Number 2

1. Identification

Product identifier

Product Name EcoArmor™ Protective Coating

Other means of identification

Synonyms Burn off protective coating, BPC

Recommended use of the chemical and restrictions on use

Recommended use Protective Coating

Restrictions on use For industrial use only

Details of the supplier of the safety data sheet

Manufacturer Address

Vitro Flat Glass LLC (Vitro) 400 Guys Run Road Cheswick, PA 15024 1-855-887-6457 (9:00 AM through 4:00 PM EST)

Emergency telephone number

Emergency telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements

Hazard statements

Not classified.

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms BPC

Chemical name	CAS No	Weight-%	Trade secret
Triethylamine	121-44-8	0.99	-

4. First-aid measures

Description of first aid measures

Remove to fresh air. Get medical attention if symptoms occur. Inhalation

Eve contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if

symptoms occur.

Skin contact Wash skin with soap and water. Get medical attention if symptoms occur.

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Clean Ingestion

mouth with water. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

No information available.

May form toxic combustion products, including hydrogen cyanide, carbon monoxide, **Hazardous combustion products**

triethylamine and nitrogen oxides, during fire conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact

with skin and eves.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate Advice on safe handling

ventilation. Avoid generation of dust. Avoid contact with skin and eyes. Avoid breathing

dust. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Triethylamine 121-44-8	STEL: 1 ppm TWA: 0.5 ppm S*	TWA: 25 ppm TWA: 100 mg/m³ (vacated) TWA: 10 ppm (vacated) TWA: 40 mg/m³ (vacated) STEL: 15 ppm (vacated) STEL: 60 mg/m³	IDLH: 200 ppm

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Powder **Appearance** Physical state Solid Color Colorless

No data available Odor **Odor threshold** No data available

Values Remarks • Method Property No data available Melting point / freezing point No data available Initial boiling point and boiling range No data available Flash point No data available **Evaporation rate** No data available No data available **Flammability**

Flammability Limit in Air

Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Vapor pressure No data available Vapor density No data available Relative density No data available Water solubility No data available Solubility(ies) No data available **Partition coefficient** No data available **Autoignition temperature** No data available 300 °C / 572 °F

Decomposition temperature No data available No data available Kinematic viscosity **Dynamic viscosity** No data available

Other information

Explosive properties No information available **Oxidizing properties** No information available Softening point No information available Molecular weight No information available **VOC Content (%)** No information available **Liquid Density** No information available **Bulk density** No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products Under normal conditions of storage and handling, hazardous decomposition products

should not be produced.

11. Toxicological information

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available. Inhalation of dust in high

concentration may cause mechanical irritation of respiratory system.

Eye contact Specific test data for the substance or mixture is not available. Dust contact with the eyes

can lead to mechanical irritation.

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

(based on components).

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Triethylamine 121-44-8	= 460 mg/kg (Rat)	= 415 mg/kg (Rabbit)	= 14.5 mg/L (Rat)1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation Dust contact with the eyes can lead to mechanical irritation.

No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

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Respiratory or skin sensitization

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Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Triethylamine 121-44-8	-	LC50: =43.7mg/L (96h, Pimephales promelas)	-	EC50: =200mg/L (48h, Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Triethylamine 121-44-8	1.45

Other adverse effects

No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

Not regulated DOT

IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Triethylamine - 121-44-8	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Triethylamine 121-44-8	5000 lb	-	-	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Triethylamine 121-44-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Triethylamine	X	X	X
121-44-8			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 0 Instability 0 Special hazards -HMIS Health hazards 1 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA (time-weighted average) STEL (Short Term Exposure Limit) TWA STEL

Ceiling Maximum limit value Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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Revision Note 7/16/21 Initial Release

> 11/12/25 Section 5 Clarification of combustion products during fire conditions. Section 10 Clarification of decomposition products during normal storage & handling conditions.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet