



**GAF**  
**Safety Data Sheet**  
**SDS # 2214**  
**SDS Date: November 2022**

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**SECTION 1: PRODUCT AND COMPANY INFORMATION**

**PRODUCT NAME:** EverGuard TPO 3 Square Low VOC Bonding Adhesive

**MANUFACTURER:** GAF

**ADDRESS:** 1 Campus Drive, Parsippany, NJ 07054

**24-HOUR EMERGENCY PHONE (CHEMTREC):** 800 – 424 – 9300

**INFORMATION ONLY:** 877 - GAF - ROOF

**APPROVED BY:** Corporate EHS

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**SECTION 2: HAZARD IDENTIFICATION****NFPA and HMIS RATINGS:**

	NFPA Hazard Rating		HMIS Hazard Rating
Health	2	Health	2
Flammable	3	Flammable	3
Reactive	0	Reactive	0
Special Hazards	-	Personal Protection	X

**GHS LABEL ELEMENTS:**

**GHS CLASSIFICATION:** Flammable Liquid – Category 2  
Eye Irritant - Category 2A  
Reproductive Toxicity - Category 2  
Target Organ (SE) - Category 3 Target Organ (RE) – Category 2

**GHS PICTOGRAMS:**

**SIGNAL WORD**

Danger

**HAZARD****STATEMENTS:**

Highly flammable liquid and vapor.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs (Neurologic: other (neuropsychological effects, auditory dysfunction and effects on color vision)) through prolonged or repeated exposure if inhaled.

**PRECAUTIONARY****STATEMENTS:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Immediately call a poison center/doctor.  
Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF exposed or concerned: Get medical advice/attention.  
Call a poison center/doctor if you feel unwell.  
Get medical advice/attention if you feel unwell.  
Take off contaminated clothing and wash it before reuse.  
If skin irritation occurs: Get medical advice/attention.  
Store in a well-ventilated place. Keep container tightly closed.  
Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.

**ADDITIONAL HAZARD IDENTIFICATION INFORMATION:**

**PRIMARY ROUTE OF EXPOSURE:** Skin Absorption, Inhalation, and Ingestion

**SIGNS & SYMPTOMS OF EXPOSURE****EYES:**

This material is an eye irritant. Contact with the liquid or exposure to mist or vapor may cause stinging, redness and swelling.

**SKIN:** This material may cause mild skin irritation. Prolonged contact may cause redness, burning and drying or cracking of the skin. Skin absorption may produce systemic toxicity.

**INGESTION:** Harmful or fatal if swallowed and/or vomiting occurs. Can enter lungs and cause damage or lung inflammation. Do not induce vomiting.

**INHALATION:** High concentrations of vapor or mist may cause irritation of the nose and throat and signs of nervous system depression. Can cause headaches, drowsiness, dizziness, and loss of coordination. May affect liver, kidneys, and respiratory system.

**ACUTE HEALTH HAZARDS:** See above.

**CHRONIC HEALTH HAZARDS:** Respiratory or lung disorders may be aggravated by exposure to this material.

**CARCINOGENICITY:** None.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	CAS #	% (BY WT)	OSHA	ACGIH	OTHER
Tert-Butyl Acetate	540-88-5	40-50	200 ppm	200 ppm	REL: 200 ppm
Acetone	67-64-1	20-30	1000 ppm	20 ppm	REL: 100 ppm
Toluene	108-88-3	30-45	200 ppm	20 ppm	REL: 100 ppm
Magnesium Oxide	1309-48-4	1-1.5	15 mg/m3	10 mg/m3	REL: NE

NE= Not Established

**SECTION 4: FIRST AID MEASURES**

**FIRST AID PROCEDURES**

**EYES:** Flush eyes with water for 15 minutes. If irritation or reddening persists, call physician.

**SKIN:** Remove contaminated clothes. Wash exposed areas with soap and water. If redness or swelling develops, seek medical attention.

**INHALATION:** Move the individual to an area with fresh air or provide oxygen immediately, call physician.

**INGESTION:** If swallowed, contact physician immediately. Do not induce vomiting. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

**NOTES TO PHYSICIANS OR  
FIRST AID PROVIDERS:**

May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

**SECTION 5: FIRE FIGHTING PROCEDURES**

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**SUITABLE EXTINGUISHING MEDIA:**

Water, dry chemical, CO<sub>2</sub>, and foam.

**HAZARDOUS COMBUSTION PRODUCTS:**

Produces acrid smoke and fumes, alcohols, aldehydes, carbon dioxide and carbon monoxide, hydrocarbons, hydrogen chloride, organic acids, phenols, and magnesium oxide fumes.

**RECOMMENDED FIRE FIGHTING  
PROCEDURES:**

Use self-contained breathing apparatus and protective clothing.

**UNUSUAL FIRE & EXPLOSION  
HAZARDS:**

Material is flammable and may be ignited by flames, sparks, heat or other sources of ignition. Water may be ineffective in fighting the fire.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**ACCIDENTAL RELEASE MEASURES:**

Dam up area to prevent spreading of material. Provide ventilation. Extinguish all open flames or electrical sparks. Dry up the compound using an absorbent material.

**SECTION 7: HANDLING AND STORAGE**

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**HANDLING AND STORAGE:**

Store in a well ventilated area at temperatures between 40 - 80° F. Avoid open flames, electrical spark, and static electricity. Container should be grounded when pouring.

**OTHER PRECAUTIONS:**

The container is hazardous when empty. Partially full or emptied container may contain explosive vapors. Do not cut, weld or solder on or near the container. Do not reuse "empty" container without commercial cleaning or reconditioning.



**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**ENGINEERING CONTROLS /  
VENTILATION:**

Provide sufficient mechanical ventilation to maintain exposure below exposure limits.

**RESPIRATORY PROTECTION:**

Use NIOSH approved organic vapor cartridge type respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respiratory use (29 CFR 1910.134).

**EYE PROTECTION:**

Safety goggles or safety glasses with side shields.

**SKIN PROTECTION:**

Wear appropriate impermeable gloves and clothing to prevent skin contact.

**OTHER PROTECTIVE EQUIPMENT:** None.

**WORK HYGIENIC PRACTICES:** Wash exposed skin prior to eating, drinking, or smoking and at the end of each shift.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE &amp; ODOR:</b>	Amber solution with solvent odor.		
<b>FLASH POINT:</b>	30° F	<b>LOWER EXPLOSIVE LIMIT:</b>	No Data
<b>METHOD USED:</b>	TCC	<b>UPPER EXPLOSIVE LIMIT:</b>	No Data
<b>EVAPORATION RATE:</b>	No Data	<b>BOILING POINT:</b>	132° F
<b>pH (undiluted product):</b>	No Data	<b>MELTING POINT:</b>	No Data
<b>SOLUBILITY IN WATER:</b>	Insoluble	<b>SPECIFIC GRAVITY:</b>	0.93 g/cm3
<b>VAPOR DENSITY:</b>	No Data	<b>PERCENT VOLATILE:</b>	No Data
<b>VAPOR PRESSURE:</b>	307 hPa	<b>MOLECULAR WEIGHT:</b>	No Data
<b>VOC WITH WATER (LBS/GAL):</b>	No Data	<b>WITHOUT WATER (LBS/GAL):</b>	No Data

#### **SECTION 10: STABILITY AND REACTIVITY**

**THERMAL STABILITY:**

**STABLE X**

**UNSTABLE**

**CONDITIONS TO AVOID (STABILITY):** Avoid open flames, electrical spark, and static electricity.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Acids, alkalis, amines, ammonia, chlorine trifluoride, halogens, nitrates, oxidizing agents, peroxides, phosphorus pentachloride, reducing agents, strong alkalis.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Produces acrid smoke and fumes, alcohols, aldehydes, carbon dioxide and carbon monoxide, hydrocarbons, hydrogen chloride, organic acids, phenols, and magnesium oxide fumes.

**HAZARDOUS POLYMERIZATION:** Will not occur.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

**TOXICOLOGICAL INFORMATION:**

Information on likely routes  
of exposure:

Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

**TERT-BUTYL ACETATE:**

**Acute oral toxicity**

LD50 (Rat, male): 4,100 mg/kg

**Acute inhalation toxicity**

LC50 (Rat): 4211 ppm

Exposure time: 6 h Test

atmosphere: vapor

Assessment: The component/mixture is classified as acute inhalation toxicity, category 4.

**Acute dermal toxicity**

LD50 (Rabbit): > 19,800 mg/kg

**ACETONE:**

**Acute oral toxicity**

LD50 (Rat, female): 5,800 mg/kg

**Acute inhalation toxicity**

LC50 (Rat, female): 76 mg/l

Exposure time: 4 h

**Acute dermal toxicity**

LD50 (Rabbit): > 7,426 mg/kg

**TOLUENE:**

**Acute oral toxicity**

LD50 (Rat): > 5,000 mg/kg

**Acute inhalation toxicity**

LC50 (Rat): 28.1 mg/l

Exposure time: 4 h

Test atmosphere: vapor

**Acute dermal toxicity**

LD50 (Rabbit): 12,124 mg/kg

**MAGNESIUM OXIDE:**

**Acute oral toxicity**

LD50 (Rat): > 5,000 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

Remarks: May cause skin irritation in susceptible persons.

**Components:**

TERT-BUTYL ACETATE:  
Result: Slight, transient irritation

ACETONE:  
Result: Slight, transient irritation

TOLUENE:  
Result: Irritating to skin.

MAGNESIUM OXIDE:  
Result: Slight, transient irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks: Vapors may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

**Components:**

TERT-BUTYL ACETATE:  
Result: Slight, transient irritation

ACETONE:  
Result: Irritating to eyes.

TOLUENE:  
Result: Irritating to eyes.

MAGNESIUM OXIDE:  
Result: Slight, transient irritation

**Respiratory or skin sensitization**

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

**Components:**

TERT-BUTYL ACETATE:  
Species: Guinea pig  
Assessment: Did not cause sensitization on laboratory animals.  
Method: Buehler Test  
Germ cell mutagenicity  
Not classified based on available information.

**Components:**

TERT-BUTYL ACETATE:  
Genotoxicity in vitro  
:  
Test Type: Ames test  
Test species: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
Result: negative

Test Type: Chromosome aberration test in vitro  
Test species: Human lymphocytes  
Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo

Test Type: in vivo assay

Test species: Rat (male and female)

Cell type: Bone marrow

Application Route: Inhalation

Result: negative

### **Carcinogenicity**

Not classified based on available information.

### **Reproductive toxicity**

Suspected of damaging fertility or the unborn child.

### **Components:**

TOLUENE:

Reproductive toxicity - Assessment

Some evidence of adverse effects on development, based on animal experiments.

STOT - single exposure

May cause respiratory irritation.

May cause drowsiness or  
dizziness.

### **Components:**

TERT-BUTYL ACETATE:

Exposure routes: Ingestion

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

ACETONE:

Exposure routes: Inhalation

Target Organs: Nervous system

Assessment: May cause drowsiness or dizziness.

TOLUENE:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

### **STOT - repeated exposure**

May cause damage to organs (Neurologic: other (neuropsychological effects, auditory dysfunction and effects on color vision)) through prolonged or repeated exposure if inhaled.

### **Components:**

TOLUENE:

Exposure routes: Inhalation

Target Organs: Neurologic: other (neuropsychological effects, auditory dysfunction and effects on color vision)

Assessment: May cause damage to organs through prolonged or repeated exposure.

### **Aspiration toxicity**

Not classified based on available information.

### **Product:**

No aspiration toxicity classification



**Components:****ACETONE:**

May be harmful if swallowed and enters airways.

**TOLUENE:**

May be fatal if swallowed and enters airways.

**Further information**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.,

Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

**SECTION 12: ECOLOGICAL INFORMATION**

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**ECOLOGICAL INFORMATION:****Ecotoxicity****Components:****TERT-BUTYL ACETATE:**

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)): 240 mg/l

Exposure time: 96 h

Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 350 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae

ErC50 (Pseudokirchneriella subcapitata (microalgae)): 16 mg/l

End point: Growth inhibition

Exposure time: 72 h

Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

NOEC (Pseudokirchneriella subcapitata (microalgae)): 2.3 mg/l

End point: Growth inhibition

Exposure time: 72 h

Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

**ACETONE:**

Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)): 4,740 - 6,330 mg/l

Exposure time: 96 h

Test Type: static test

LC50 (Pimephales promelas (fathead minnow)): 8,733 - 9,482 mg/l

Exposure time: 96 h

Test Type: flow-through test

#### Toxicity to algae

NOEC (*Microcystis aeruginosa* (blue-green algae)): 530 mg/l  
Exposure time: 8 d  
Test Type: static test  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)  
NOEC (*Daphnia magna* (Water flea)): 2,112 mg/l  
Exposure time: 28 d  
Test Type: flow-through test

#### **TOLUENE:**

##### Toxicity to fish

LC50 (*Oncorhynchus kisutch* (coho salmon)): 5.5 mg/l  
Exposure time: 96 h  
Test Type: flow-through test  
Toxicity to daphnia and other aquatic invertebrates  
EC50 (*Ceriodaphnia dubia*): 3.78 mg/l

Exposure time: 48 h  
Remarks: Mortality

#### Toxicity to algae

EC50 (*Pseudokirchneriella subcapitata* (microalgae)): > 433 mg/l  
End point: Growth inhibition  
Exposure time: 96 h  
NOEC (*Scenedesmus quadricauda* (Green algae)): > 400 mg/l  
End point: Growth inhibition  
Exposure time: 7 d

#### Toxicity to fish (Chronic toxicity)

NOEC (*Oncorhynchus mykiss* (rainbow trout)): 1.39 mg/l  
Exposure time: 40 d  
Test Type: flow-through test  
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)  
NOEC (*Ceriodaphnia dubia*): 0.74 mg/l  
Exposure time: 7 d  
No data available  
Persistence and degradability

#### **Components:**

##### **TERT-BUTYL ACETATE:**

Biodegradability  
aerobic  
Result: Not readily biodegradable.  
Biodegradation: 50 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

##### **ACETONE:**

##### Biodegradability

Result: Readily biodegradable.  
Biodegradation: 90.9 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**TOLUENE:**

Biodegradability

Result: Readily biodegradable.

**MAGNESIUM OXIDE:**

Biodegradability

Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

No data available

**Bioaccumulative potential components:****TERT-BUTYL ACETATE:**

Partition coefficient: n-octanol/water

log Pow: 1.76

**ACETONE:**

Partition coefficient: n-octanol/water

log Pow: -0.24

**TOLUENE:**

Bioaccumulation

Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 94

Exposure time: 3 d

Concentration: 0.05 mg/l

Method: Not reported

**SECTION 13: DISPOSAL CONSIDERATIONS**

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**WASTE DISPOSAL METHOD:** State or local regulations may also apply if they differ from the federal regulation.

**SECTION 14: TRANSPORTATION INFORMATION**

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**U.S. DOT TRANSPORTATION**

**PROPER SHIPPING NAME:** Adhesive

**HAZARD CLASS:** 3

**ID NUMBER:** UN1133

**PACKING GROUP:** II

**LABEL STATEMENT:** N/A

OTHER: N/A

## IATA

PROPER SHIPPING NAME: Adhesive

HAZARD CLASS: 3

ID NUMBER: UN1133

PACKING GROUP: II

LABEL STATEMENT: N/A

OTHER: N/A

## IMDG

PROPER SHIPPING NAME: Adhesive

HAZARD CLASS: 3

ID NUMBER: UN1133

PACKING GROUP: II

LABEL STATEMENT: N/A

OTHER: N/A

Marine Pollutant: No

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## SECTION 15: REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS

**TSCA:** This product and its components are listed on the TSCA 8(b) inventory.

**CERCLA:** None

### SARA

**311/312 HAZARD CATEGORIES:** Fire Hazard, Acute Health Hazard, Chronic Health Hazard.

**313 REPORTABLE INGREDIENTS:** Toluene 108-88-3 5.94%

**CALIFORNIA PROPOSITION 65:** This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.  
Reproductive: Toluene.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances lists:

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	Yes

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**SECTION 16: OTHER INFORMATION**


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**ADDITIONAL COMMENTS:** None.

**DATE OF PREVIOUS SDS:** January 2017

**CHANGES SINCE PREVIOUS SDS:** Overall review.

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