



SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: PVC Edge Sealant, Clear
TRADE NAME: N/A
**CHEMICAL NAME /
SYNONYM:** N/A
CHEMICAL FAMILY: Vinyl Sealant
MANUFACTURER: GAF
ADDRESS: 1 Campus Drive, Parsippany, NJ 07054
**24-HOUR EMERGENCY
PHONE (CHEMTREC):** 800 – 424 – 9300
INFORMATION ONLY: 800 – 766 – 3411
PREPARED BY: Corporate EHS
APPROVED BY: Corporate EHS

SECTION 2: HAZARD IDENTIFICATION

NFPA and HMIS RATINGS:

	NFPA Hazard Rating		HMIS Hazard Rating
	2		2
	3		3
	2		2
Special Hazards	-	Personal Protection	X

GHS LABEL ELEMENTS:

GHS CLASSIFICATION: Flammable Liquid - Category 2
Eye Irritant - Category 2A
Eye Damage - Category 1
Skin Irritant - Category 2
Skin Sensitizer - Category 1
Target Organ (SE) - Category 3
Acute Toxicity - Category 4
Hazardous to the aquatic environment (acute) - Category 2
Hazardous to the aquatic environment (chronic) - Category 2



SIGNAL WORD: Danger

HAZARD STATEMENTS: Flammable liquid and vapor
Harmful if swallowed
Harmful if inhaled
Harmful in contact with skin or inhaled
May cause an allergic skin reaction
Causes serious eye irritation
May cause serious eye damage
May cause respiratory irritation
Harmful to the aquatic environment with long lasting effects

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Inhalation, Skin, and Ingestion.

SIGNS & SYMPTOMS OF EXPOSURE

EYES: This material is expected to cause eye irritation.

SKIN: Prolonged or repeated contact may cause skin to become dry or cracked. Causes dermatitis.

INGESTION: May result in a health hazard if swallowed. Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

INHALATION: Overexposure may cause coughing, shortness of breath, dizziness, intoxication and collapse. It may cause irritation to the respiratory tract and to other mucous membranes. Inhaling mist may produce signs of central nervous system involvement.

ACUTE HEALTH HAZARDS: Tetrahydrofuran: Causes narcotic effects in high concentrations. It may cause irritation to the respiratory tract and to other mucous membranes. Suspect eye irritant. Slight skin irritant – defatting action. Moderate ingestion hazard.
Butylated Hydroxy Toluene: Moderate skin irritant. Severe eye irritant.

CHRONIC HEALTH HAZARDS: Tetrahydrofuran: Repeated or prolonged exposure may cause signs of central nervous system depression and respiratory irritation. This material has been shown to induce tumors in laboratory animals.
Butylated Hydroxy Toluene: No adverse chronic human health effects have been reported for this material.
This material may aggravate pulmonary/bronchial disease and/or cause breathing difficulty.

CARCINOGENICITY: Refer to Section 15 of this SDS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	% (BY WT)	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
THF Tetrahydrofuran	109-99-9	80-82	50 ppm	200 ppm	REL: 200 ppm
Vinyl Polymer Compound	Mixture	18-20	NE	NE	NE
(2-Hydroxy-4-(octyloxy)-phenyl)phenylmethanone	1843-05-6	0.1-0.2	NE	NE	NE
Butylated Hydroxy Toluene	128-37-0	<0.1	NE	2 mg/m3	REL: 10 mg/m3

NE= None Established

SECTION 4: FIRST AID MEASURES**FIRST AID PROCEDURES**

EYES: Immediately flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower lids. If pain or irritation persists, promptly obtain medical attention.

SKIN: Promptly remove soiled clothing/wash thoroughly before reuse. Wash skin thoroughly with mild soap and water. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

INHALATION: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain medical attention if breathing difficulty persists.

INGESTION: Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. If large quantity swallowed, give lukewarm water (pint/1/2 liter) if victim completely conscious/alert. Obtain emergency medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA: SMALL FIRE: Use dry chemicals, CO₂, water spray or alcohol-resistant foam.

LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Do not use solid water stream.

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition may produce carbon monoxide and other toxic vapors.

RECOMMENDED FIRE FIGHTING PROCEDURES:

Protective Equipment/Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighter's protective clothing will only provide limited protection.

Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after the fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Vapors may be heavier than air. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. May travel long distances along the ground before igniting and flashing back to vapor source.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:

For industrial use only. Keep container tightly closed when not in use. Extinguish all ignition sources. Wear recommended personal protective equipment. Containers must be properly grounded before beginning transfer. All electrical equipment should be grounded and conform to applicable electrical codes and regulatory requirements. Check atmospheres for explosive vapor levels and oxygen deficiencies. Observe precautions pertaining to confined space entry. Check periodically to confirm inhibitor content. If below desired level, add extra inhibitor/mix well to be effective. Use only non-sparking tools. Carefully vent any internal pressure before removing closure. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Handle empty containers with care;

vapor/residue may be flammable.

Store closed drums with bung up position. Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents. Vapor space above stored liquid may be flammable/explosive unless blanketed with inert gas. Can self react/polymerize/liberate heat/raising temperature, pressure/possibly rupture container unless properly inhibited. Stainless steel containers.

OTHER PRECAUTIONS: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION:

Electrical equipment should be grounded and conform to applicable electrical code. Provide local exhaust or general room ventilation to minimize exposure to vapors. Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures.

RESPIRATORY PROTECTION:

If exposure can potentially exceed the exposure limit(s), respiratory protection recommended or approved by appropriate local, state or international agency must be used.

EYE PROTECTION:

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

SKIN PROTECTION:

Depending on conditions of use, protective gloves, apron, boots, head and face protection should be worn.

OTHER PROTECTIVE EQUIPMENT: N/A

WORK HYGIENIC PRACTICES:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

EXPOSURE GUIDELINES:

Tetrahydrofuran (109-99-9)

- OSHA VPEL 200 ppm – TWA

- ACGIH TLV 200 ppm – TWA

Vinyl Compound Polymer

- No exposure limits established.

Butylated Hydroxy Toluene (128-37-0)

- ACGIH TLV 2mg/m³ – TWA

(2-Hydroxy-4-(octyloxy)-phenyl)phenylmethanone (1843-05-6)

- No exposure limits established.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Clear to transparent syrupy liquid with an Ether-like odor.		
FLASH POINT:	1° F (-17° C) TCC	LOWER EXPLOSIVE LIMIT:	2 vol%
METHOD USED:	N/A	UPPER EXPLOSIVE LIMIT:	11 vol%
EVAPORATION RATE:	N/A	BOILING POINT:	149° F (65° C) @ 760 mmHg
pH (undiluted product):	N/A	MELTING POINT:	N/A
SOLUBILITY IN WATER:	N/A	SPECIFIC GRAVITY:	0.93 @ 77° F
VAPOR DENSITY:	~2.5 @ 77° F @ air=1	PERCENT VOLATILE:	80-82%
VAPOR PRESSURE:	155 mmHg @ 77° F	MOLECULAR WEIGHT:	N/A
VOC WITH WATER (LBS/GAL):	N/A	WITHOUT WATER (LBS/GAL):	N/A

SECTION 10: STABILITY AND REACTIVITY**THERMAL STABILITY:****STABLE X****UNSTABLE** **CONDITIONS TO AVOID (STABILITY):**

This product is stable with an appropriate level of butylated hydroxy toluene inhibitor (minimum 200 ppm), but reactive without. May form peroxides in the presence of air. May react with oxygen to form unstable peroxides. Peroxides are thermally unstable and shock sensitive.

INCOMPATIBILITY (MATERIAL TO AVOID):

Reacts vigorously with strong oxidizers and acids.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

HAZARDOUS POLYMERIZATION:

May occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Tetrahydrofuran LC50 (Inhl) Rat 21000 ppm 3 hours

Repeated Dose Toxicity: The National Toxicology Program has reported that exposure of rats and mice to THF vapor levels up to 1800 ppm 6hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. Symptoms of respiratory tract irritation and damage to respiratory epithelium were reported in rats exposed to 5000 ppm of tetrahydrofuran for 90 days. Elevation of SGPT suggests a disturbance of liver function. The No Observed Effect Level (NOEL) was reported to be 200 ppm (JPN.J.Ind Health 24,379,1982). Tetrahydrofuran was not genotoxic in microorganisms (Cancer Research 39:682, 1979), drosophila (Env.Mut. 7:325,1985), or in the unscheduled DNA synthesis assays (Env.Mut. 5:482, 1983).

Butylated Hydroxy Toluene LD50(Oral) Rat 890 mg/kg
Mouse 650 mg/kg

Carcinogenicity: When administered to rats by stomach tube, butylated hydroxy toluene (BHT) produced tumors of the fore stomach. On the basis of this information an International Agency for Research on Cancer (IARC) working group concluded that there is 'limited evidence' for the carcinogenicity of butylated hydroxy toluene in laboratory animals. No case report or epidemiological study of carcinogenicity to humans was available to the working group; thus, no evaluation could be made of the carcinogenicity of butylated hydroxy toluene to humans.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Ecotoxicity: This material is expected to be non-hazardous to aquatic species.

(for component Tetrahydrofuran)

Toxicity to Fish:/Amphibians

LC50 / 96 hours	fathead minnow	2160 mg/l
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Toxicity to Aquatic Invertebrates:

LC50 / 24 hours	daphnia	5930 mg/l
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Toxicity to Aquatic Plants

NOEC / 48 hours	algae	225 mg/l
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Environmental Fate

This material is volatile and water soluble. It may enter soil and may contaminate water. It is expected to be poorly adsorbed onto soils or sediments. This material is likely to evaporate from soil and water. Theo. BOD 100% (14 day).

Bioaccumulation

This material is not expected to bioaccumulate.

Biodegradation

This material is expected to be readily biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Contaminated product, soil or water may be hazardous waste due to low flash point. Assure effluent complies with applicable regulations. Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids in systems compatible with water soluble wastes. Avoid flame-outs. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass.

RCRA HAZARD CLASS: Contaminated product/soil/water may be regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Occupational Safety and Health Administration (OSHA) hazardous waste due to potentially low flash point. (See 40 U.S. Code of Federal Regulations (CFR) 261 and 29 CFR 1910).

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT TRANSPORTATION

PROPER SHIPPING NAME: Flammable Liquid, N.O.S.
HAZARD CLASS: 3
ID NUMBER: UN1993
PACKING GROUP: PG-II
LABEL STATEMENT: N/A
OTHER: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA: The intentional ingredients of this product are listed.

CERCLA: 40 CFR 302.4(a)
Tetrahydrofuran – Reportable Quantity 1000 lbs.

SARA

311/312 HAZARD CATEGORIES: Fire hazard, acute health hazard, chronic health hazard

313 REPORTABLE INGREDIENTS: None

CALIFORNIA PROPOSITION 65: N/A

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
Tetrahydrofuran	109-99-9	Yes	Yes	Yes	Yes	Yes	Yes
(2-Hydroxy-4-(octyloxy)-phenyl)phenylmethanone	1843-05-6	No	No	No	No	No	No
Butylated Hydroxy Toluene	128-37-0	No	No	No	No	No	No

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: New MSDS

DATE OF PREVIOUS SDS: October 2013

CHANGES SINCE PREVIOUS SDS: Headquarters Address Change

This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.