



**GAF**  
**Safety Data Sheet**  
**SDS # 2209**  
**SDS Date: January 2019**

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**SECTION 1: PRODUCT AND COMPANY INFORMATION**

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**PRODUCT NAME:** ThermaCal® 1 Ventilated Roof Insulation Panels  
ThermaCal® 2 Ventilated Roof Insulation Panels  
ThermaCal® Non-Ventilated Roof Insulation Panels  
ThermaCal® Wall Exterior Wall Insulation Panels

**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

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**SECTION 2: HAZARDS IDENTIFICATION**

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As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, the products listed below are considered articles and do not require an SDS. In addition, articles are not included in the scope of the Globally Harmonization System (GHS). As such, the GHS labeling elements are not included on this SDS. All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk. Although these products are not subject to the OSHA Standard or GHS labeling elements, GAF would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and be made available for employees and other users of this product. In addition, the recommendations for handling and use of these products should be included in worker training programs.

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**ADDITIONAL HAZARD IDENTIFICATION INFORMATION:**

**PRIMARY ROUTE OF EXPOSURE:** Inhalation, Skin Contact, Eye Contact, Ingestion

**SIGNS & SYMPTOMS OF EXPOSURE**

**EYES:** May cause eye irritation.

<b>SKIN:</b>	May cause skin irritation.
<b>INGESTION:</b>	Can cause gastrointestinal irritation.
<b>INHALATION:</b>	May cause respiratory irritation.
<b>ACUTE HEALTH HAZARDS:</b>	Exposure to this product may aggravate pre-existing skin and respiratory diseases.
<b>CHRONIC HEALTH HAZARDS:</b>	None known.
<b>CARCINOGENICITY:</b>	Carbon black is classified as a 2B carcinogen (possibly carcinogenic to humans) by the International Agency for Research on Cancer (IARC).  Formaldehyde is classified as a 1 carcinogen (Carcinogenic to humans) by the International Agency for Research on Cancer (IARC).  Wood dust (certain types) is classified as a 1 carcinogen (Carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

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


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CHEMICAL NAME	CAS #	% (BY WT)	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
Polyisocyanurate Foam	-	5-90	NE	NE	NE
Paper Facing	-	0 -30	NE	NE	NE
Cyclopentane	287-92-3	0-5	NE	600 ppm	600 ppm
Pentane	109-66-0	0-5	1000 ppm	120 ppm	660 ppm
Formaldehyde	50-00-0	0-0.0011	.075 ppm	.016 ppm	.3 ppm Ceiling
Isopentane	78-78-4	0-5	NE	NE	NE
Wood Dust	-	0-1	NE	NE	NE
Tris (monochloropropyl) Phosphate	13674-84-5	0-5	NE	NE	NE
Carbon black	1333-86-4	0- 5	3.5 mg/m3	3.5 mg/m3	3.5 mg/m3

**NE = Not Established**

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**SECTION 4: FIRST AID MEASURES**

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**FIRST AID PROCEDURES**

<b>EYES:</b>	Flush with warm water for 15 minutes and seek immediate medical if irritation occurs.
<b>SKIN:</b>	Wash with soap and water for 15 minutes.
<b>INHALATION:</b>	Move victim to fresh air. Seek immediate medical attention if symptoms occur.
<b>INGESTION:</b>	Wash out mouth with water. Do not induce vomiting directed to do so by medical personnel.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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**SECTION 5: FIRE FIGHTING PROCEDURES**

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<b>SUITABLE EXTINGUISHING MEDIA:</b>	Water, CO <sub>2</sub> , dry chemical, and foam extinguishers may be used.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Carbon dioxide, carbon monoxide with possible traces of HCN.
<b>RECOMMENDED FIRE FIGHTING PROCEDURES:</b>	Wear impermeable protective clothing and self-contained breathing apparatus.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b>	Wood dust may ignite at temperatures in excess of 400°F.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**ACCIDENTAL RELEASE MEASURES:** Vacuum or sweep up material and place in a designated, labeled waste container. Where prescribed PPE when cleaning up spills.

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**SECTION 7: HANDLING AND STORAGE**

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**HANDLING AND STORAGE:** Materials should be kept, dry and protected.

**OTHER PRECAUTIONS:** Material should be handled as directed.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS / VENTILATION:** Local exhaust ventilation may be used in areas where cutting is performed to remove airborne dust and fibers.

**RESPIRATORY PROTECTION:** If personal exposure concentrations cannot be maintained below the appropriate exposure limits using engineering controls, a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher may be used.

**EYE PROTECTION:** Safety glasses with side shields are recommended.

**SKIN PROTECTION:** Wear leather or cotton gloves when handling this product to avoid prolonged skin contact and irritation. Barrier creams may also be used to reduce skin contact and irritation caused by fiber glass.

**OTHER PROTECTIVE EQUIPMENT:** Ear protection may be worn to prevent airborne dust from entering the ear. A cap, loose-fitting long sleeved shirt and long pants should be worn to protect skin from irritation.

**WORK HYGIENIC PRACTICES:** Workers should wash hands and face before eating, drinking, and smoking. Clothes should be washed separately from other clothes to prevent fiber glass from being transferred.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE &amp; ODOR:</b>	Solid, yellow/tan and odorless.		
<b>FLASH POINT:</b>	Not Applicable	<b>LOWER EXPLOSIVE LIMIT:</b>	Not Applicable
<b>METHOD USED:</b>	Not Applicable	<b>UPPER EXPLOSIVE LIMIT:</b>	Not Applicable
<b>EVAPORATION RATE:</b>	Not Applicable	<b>BOILING POINT:</b>	Not Applicable
<b>pH (undiluted product):</b>	Not Applicable	<b>MELTING POINT:</b>	Not Applicable
<b>SOLUBILITY IN WATER:</b>	Insoluble	<b>SPECIFIC GRAVITY:</b>	Not Applicable
<b>VAPOR DENSITY:</b>	Not Applicable	<b>PERCENT VOLATILE:</b>	Not Applicable
<b>VAPOR PRESSURE:</b>	Not Applicable	<b>MOLECULAR WEIGHT:</b>	Not Applicable

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**SECTION 10: STABILITY AND REACTIVITY**

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THERMAL STABILITY:

STABLE X

UNSTABLE 

CONDITIONS TO AVOID (STABILITY):

Keep away from heat, sparks, or open flame.

INCOMPATIBILITY (MATERIAL TO AVOID):

Acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

Under normal conditions, hazardous decomposition will not occur.

HAZARDOUS POLYMERIZATION:

Will not occur.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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TOXICOLOGICAL INFORMATION:

Acute toxicity

Butane, 2-methyl-:

LC50 inhalation Mouse: 150 mg/l, 2 h  
LC50 inhalation Rat: 280 mg/l, 4 h

Cyclopentane:

LD50 Oral Rat: 11,400 mg/kg  
LD50 Oral Mouse: 12,800 mg/kg

Pentane:

LD50 Oral Rat: > 2,000 mg/kg  
LC50 inhalation Rat: 364 mg/l, 4 h  
LD50 Other Mouse: 446 mg/kg

**Acute toxicity cont.:**

<b>Formaldehyde:</b>	LD50 Oral Rat: 100 mg/kg LD50 Oral Mouse: 42 mg/kg LD50 Oral Mouse: 385 mg/kg LD50 Oral Mouse: 500 mg/kg LD50 Oral Rat: 500 mg/kg LC50 inhalation Mouse: 0.454 mg/l, 4 h LC50 inhalation Mouse: 0.505 mg/l, 2 h LC50 inhalation Rat: 0.578 mg/l, 2 h LC50 inhalation Rat: 250 ppm, 2 h LC50 inhalation Rat: 815 ppm, 0.5 h LC50 inhalation Rat: 250 ppm, 4 h LD50 Dermal Rabbit: 270 mg/kg LD50 Other Rat: 420 mg/kg LD50 Other Mouse: 300 mg/kg LD50 Other Mouse: 300 mg/kg LD50 Other Rat: 87 mg/kg LD50 Other Rat: 420 mg/kg
<b>Carbon black:</b>	LD50 Oral Rat: > 15,400 mg/kg LD50 Dermal Rabbit: > 3,000 mg/kg

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**SECTION 12: ECOLOGICAL INFORMATION**

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**ECOLOGICAL INFORMATION:****Aquatic ecotoxicity**

<b>Aluminum:</b>	4 d LC50 Fresh water Oncorhynchus mykiss: 0.31 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 0.16 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 0.12 mg/l
<b>Formaldehyde:</b>	4 d LC50 Fresh water Pimephales promelas: 24.1 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 47.2 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 98 mg/l 4 d LC50 Fresh water Lepomis macrochirus: 40 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 40 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 68.8 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 68.4 mg/l 4 d LC50 Fresh water Oncorhynchus mykiss: 47.2 mg/l 2 d EC50 Fresh water Daphnia magna: 29 mg/l 2 d EC50 Fresh water Daphnia magna: 14 mg/l 2 d EC50 Fresh water Daphnia magna: 14.6 mg/l

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**WASTE DISPOSAL METHOD:** Dispose of according to all federal, state and local applicable regulations.

**RCRA HAZARD CLASS:** Not Applicable.

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**SECTION 14: TRANSPORTATION INFORMATION**

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**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

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**SECTION 15: REGULATORY INFORMATION**

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**U.S. FEDERAL REGULATIONS**

**TSCA:** Not Applicable.

**CERCLA:** Not Applicable.

**SARA** Not Applicable.

**311/312 HAZARD CATEGORIES:** Not Applicable.

**313 REPORTABLE** Not Applicable.

**INGREDIENTS:**

**CALIFORNIA PROPOSITION 65:** This product contains formaldehyde, a chemical known to the State of California to cause cancer.

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
Aluminum	7429-90-5	Yes	No	Yes	Yes	Yes	Yes
Cyclopentane	287-92-3	Yes	Yes	Yes	Yes	Yes	Yes
Pentane	109-66-0	Yes	Yes	Yes	Yes	Yes	Yes
Formaldehyde	50-00-0	Yes	Yes	Yes	Yes	Yes	Yes
Wood Dust	-	No	No	Yes	No	No	Yes
Carbon black	1333-86-4	Yes	No	Yes	Yes	Yes	Yes

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#### SECTION 16: OTHER INFORMATION

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**ADDITIONAL COMMENTS:** None

**DATE OF PREVIOUS MSDS:** October 2015

**CHANGES SINCE PREVIOUS SDS:** Sections 14 and 15.

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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.