

Section 1 - Product and Company Identification

Material Name Product Code Product Description	 * APOC 246 Energy-Armor Heavy Duty Elastomeric Roof Coating * AP-2461, AP-2465 * White Liquid.
Product Use	* White Reflective Roof Coating
Synonyms	* White Elastomeric Roof Coating
Manufacturer	* Gardner Gibson 4701 E. 7th Avenue Tampa, FL 33605 United States www.gardner-gibson.com Please use "Contact Us" form on the website
Telephone	
Technical	* 813-248-2101
Emergency	* 800-424-9300
<u>Emergency</u>	* 703-527-3887
Preparation Date	* 11/4/2020
Last Revision Date	* 11/4/2020

Section 2 - Hazards Identification

Emergency Overview

WARNING

Causes mild skin irritation. Harmful if swallowed.

- PreventionDo not handle until all safety precautions have been read and understood. Use personal
protective equipment as required. Wash thoroughly after handling.
- **Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.
- **Storage/Disposal** Store in a closed container. Do not allow product to freeze. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



CAUTION - May cause eye and skin irritation on contact.

Physical Form	* Liquid
Color	* White Liquid.
Odor	* Acrylic Paint-Like Odor.
Flash Point	* > 247 F(> 119.4444 C)
OSHA	* Irritant
WHMIS	* Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B
GHS	 * Skin Corrosion/Irritation - Category 3, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 2
NFPA: Fire Instability 0 0 0 0 0 0 0 0 0 0 0 0 0	ts
Inhalation	
Acute (Immediate)	* Inhalation of vapors or mists may cause central nervous system depression, light- headedness, headache, nausea and loss of coordination.
Chronic (Delayed)	* Under normal conditions of use no health effects are expected

Chronic (Delayed) * Under normal conditions of use, no health effects are expected.

Skin	
Acute (Immediate)	* May cause irritation.
Chronic (Delayed)	* Repeated and prolonged exposure to the skin may cause dermatitis.
Eye	
Acute (Immediate)	* Likely to cause eye irritation, burning, tearing, etc. on contact with the eyes. If swelling and irritation persist, seek medical attention.
Chronic (Delayed)	* Direct contact may cause slight to moderate irritation.
Ingestion	
Acute (Immediate)	* May cause irritation. May affect the nervous system. May be harmful or fatal if swallowed.
Chronic (Delayed)	* Repeated and prolonged exposure may cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Carcinogenic Effects					
	CAS	IARC	NTP		
Titanium Dioxide	13463-67-7	Group 2-Possible Carcinogen	Evidence of Carcinogenicity		

Section 3 - Composition/Information on Ingredients

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Acrylic Polymer Solution	CAS#: 68698-67-9	40.0%			
Calcium Carbonate	CAS#: 1317-65-3	35.0%			
Kaolin Clay	CAS#: 1332-58-7	2.0%			
Titanium Dioxide	CAS#: 13463-67-7	9.0%	Ingestion/Oral-Rat LD50 · 60 g/kg		
Hydroxyethylcellulose	CAS#: 9004-62-0	0.5%			

Surfactant Additive	CAS#: 98113-10-1	0.5%		
Propylene Glycol	CAS#: 57-55-6	<1.0%	Ingestion/Oral-Rat LD50 · 20 g/kg	
Texanol Ester	CAS#: 25265-77-4	<1.0%	Ingestion/Oral-Rat LD50 · 3200 mg/kg	

Non-Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Water	CAS#: 7732-18-5	<13.0%			

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

Inhalation	* IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If signs/symptoms continue, get medical attention.
Skin	* Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
Eye	* If eye irritation persists: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	* If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 - Fire Fighting Measures

Extinguishing Media	* LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
Unsuitable Extinguishing Media	* No data available.
Firefighting Procedures	 Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away.
Unusual Fire and Explosion Hazards	* Product containers may rupture when exposed to extreme heat. Precaustions should be taken to prevent release of materials.
Hazardous Combustion Products	* Non-combustible, substance itself does not burn but may decompose upon heating to produce toxic fumes.
Protection of Firefighters	 Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Flash Point	* > 247 F(> 119.4444 C) CC (Closed Cup)

Section 6 - Accidental Release Measures

Personal Precautions	* Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Emergency Procedures	* Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.
Environmental Precautions	* Avoid run off to waterways and sewers.
Containment/Clean-up Measures	 * Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE)
Prohibited Materials	* Avoid contact with strong oxidizing agents and acids.

Section 7 - Handling and Storage

Handling	* KEEP OUT OF THE REACH OF CHILDREN! Keep containers tightly closed when not in use.
Storage	* Avoid extreme temperatures and freezing. Keep container/package tightly closed and in a well-ventilated place.
Special Packaging Materials	* Not Applicable.
Incompatible Materials or Ignition Sources	* Avoid contact with strong oxidizing agents and acids.

Section 8 - Exposure Controls/Personal Protection

Personal Protective Equipment

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Pictograms	-	É	ØØ	2

Respiratory * When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.
 Eye/Face * Wear ANSI approved safety glasses with side shields or safety goggles.

Hands * Wear chemical resistant gloves with repeated or prolonged exposure.

Engineering Measures/Controls * Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines					
	Result	Canada Ontario	Mexico	NIOSH	OSHA
Propylene Glycol (57-55-6)	TWAs	50 ppm TWAEV (total aerosol and vapour); 155 mg/m3 TWAEV (total aerosol and vapour); 10 mg/m3 TWAEV (for assessing the visibility in a work environment, aerosol only)	Not established	Not established	Not established
Titanium Dioxide (13463-67-7)	TWAs	10 mg/m3 TWAEV (total dust)	10 mg/m3 TWA (as Ti)	Not established	15 mg/m3 TWA (total dust)
Calcium Carbonate (1317-65-3)	TWAs	Not established	10 mg/m3 TWA	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Section 9 - Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	White liquid with the consistency of paint.
Color	White Liquid.	Odor	Acrylic Paint-Like Odor.
Taste	No data available.	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	No data available		
General Properties			
Boiling Point	212 to 245 F(100 to 118.3333 C)	Melting Point	No data available

Decomposition Temperature	No data available	Heat of Decomposition	Not relevant
рН	8 @ 25 C(77 F)	Specific Gravity/Relative Density	1.43 Water=1
Density	11.94 lbs/gal @ 25 C(77 F)	Bulk Density	No data available
Water Solubility	Soluble 100 % @ 25 C(77 F)	Solvent Solubility	Not relevant
Viscosity	115 - 120 Krebs-Stormer (KU) @ 25 C(77 F)		
Volatility			
Vapor Pressure	0.1 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 Ether = 1	VOC (Wt.)	No data available
VOC (Vol.)	< 40 g/L	Volatiles (Wt.)	No data available
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	> 247 F(> 119.4444 C)	Flash Point Test Type	CC (Closed Cup)
UEL	No data available	LEL	No data available
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	Not relevant
Heat of Combustion (ΔHc)	Not relevant	Burning Time	Not relevant
Flame Duration	Not relevant	Flame Height	Not relevant
Flame Extension	Not relevant	Ignition Distance	Not relevant
Environmental			
Half-Life	Not relevant	Octanol/Water Partition coefficient	Not relevant
Coefficient of Water	Not relevant	Bioaccumulation Factor	Not relevant
Bioconcentration Factor	Not relevant	Biochemical Oxygen Demand BOD/BOD5	Not relevant
Chemical Oxygen Demand	Not relevant	Persistence	Not relevant
Degradation	Not relevant		

Section 10 - Stability and Reactivity

- Stability **Hazardous Polymerization Conditions to Avoid Incompatible Materials** Products
- * Stable under normal temperatures and pressures.
- * Hazardous polymerization not indicated.
- * Excessive heat and freezing.
- * Strong oxidizers and acids.
- **Hazardous Decomposition**
- * No known issues under normal usage conditions.

Section 11 - Toxicological Information

Component Name	CAS	Data
Water (<13.0%)	7732-18-5	Acute Toxicity: orl-rat LD50:>90 gm/kg;
Titanium Dioxide (9.0%)	13463-67-7	Acute Toxicity: orl-rat TDLo:60 gm/kg; Irritation: skn-hmn 300 ug/3D-I MLD
Propylene Glycol (<1%)	57-55-6	Acute Toxicity: orl-rat LD50:20 gm/kg; skn-hmn TCLo:10 pph; skn-hmn TDLo:5 mg/kg/7D-l; Irritation: skn-hmn 500 mg/7D MLD
Texanol Ester (<1%)	25265-77-4	Acute Toxicity: orl-rat LD50:3200 mg/kg; ihl-rat LC :>3500 mg/m3/6H
Information (Grou	p 2): Titaniur	ed that the following chemicals in this product are carcinogenic to humans n Dioxide. Risk of cancer depends on duration and level of exposure to this or aerosol mist.

Section 12 - Ecological Information

Ecological Fate	* No data available.
Persistence/Degradability	* No data available.
Bioaccumulation Potential	* No data available.
Mobility in Soil	* No data available.
Other Information	* Do not allow product exposure to the ground or into any waterway. Do not allow entry into municipal sewer systems.

Section 13 - Disposal Considerations

Product

* Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transportation Information

DOT - United States - Department of Transportation - Shipping Name: Not Regulated.

TDG - Canada - Transportation of Dangerous Goods - Shipping Name: Not Restricted.

IMO/IMDG - International Maritime Transport Shipping Name: Not Regulated.

IATA - International Air Transportation Association - Not Regulated.

Section 15 - Regulatory Information

SARA Hazard Classifications * Acute, Chronic

State Right To Know					
Component	CAS	MA	MN	NJ	PA
Water	7732-18-5	No	No	No	No
Acrylic Polymer Solution	68698-67-9	No	No	No	No
Calcium Carbonate	1317-65-3	Yes	Yes	Yes	Yes
Kaolin Clay	1332-58-7	No	No	No	No
Titanium Dioxide	13463-67-7	Yes	Yes	Yes	Yes
Propylene Glycol	57-55-6	No	Yes	Yes	Yes
Texanol Ester	25265-77-4	No	No	No	No

Inventory				
Component	CAS	EU EINECS	TSCA	
Water	7732-18-5	Yes	Yes	
Acrylic Polymer Solution	68698-67-9	No	No	
Calcium Carbonate	1317-65-3	Yes	Yes	
Kaolin Clay	1332-58-7	No	No	
Titanium Dioxide	13463-67-7	Yes	Yes	
Propylene Glycol	57-55-6	Yes	Yes	
Texanol Ester	25265-77-4	Yes	Yes	

Canada

Labor

Canada - WHMIS - Classifications of Substances

 Calcium Carbonate 	1317-65-3	D2A
 Titanium Dioxide 	13463-67-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS website.)
 Propylene Glycol 	57-55-6	Uncontrolled product according to WHMIS classification criteria
 Texanol Ester 	25265-77-4	Uncontrolled product according to WHMIS classification criteria

United States

Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Calcium Carbonate	1317-65-3	Not Listed
 Titanium Dioxide 	13463-67-7	Not Listed
 Propylene Glycol 	57-55-6	Not Listed
 Texanol Ester 	25265-77-4	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

Calcium Carbonate	1317-65-3	Not Listed
 Titanium Dioxide 	13463-67-7	Not Listed

 Propylene Glycol 	57-55-6	Not Listed
 Texanol Ester 	25265-77-4	Not Listed

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

1317-65-3	Toxic
13463-67-7	Toxic
57-55-6	Combustible
25265-77-4	Not Listed
	57-55-6

Other Information

* WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information		
Preparation Date	* 11/4/2020	
Last Revision Date	* 11/4/2020	
Disclaimer/Statement of Liability	* This information relates to the specific material designated and may not be valid for such material used in 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 is made as to its accuracy, reliability or completeness. It is the users responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.	