G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 1 of 16 Print Date 10/06/2023

SAFETY DATA SHEET

G-219R CACTUS GREEN R HDPE

Section 1. Identification			
GHS product identifier Chemical name	:	G-219R CACTUS GREEN R HDPE Mixture	
CAS number Other means of identification Product type	:	Mixture CC10376423 solid	
<u>Relevant identified uses of the subs</u> Product use	tance :	e or mixture and uses advised against Industrial applications.	
Supplier's details	:	AVIENT CORPORATION 33587 Walker Road, Avon Lake, OH 44012	
		1 (440) 930-1000 or 1 (844) 4AVIENT	
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).	

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
GHS label elements		
Signal word Hazard statements	:	No signal word. No known significant effects or critical hazards.

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023 Page 2 of 16 Print Date 10/06/2023

Precautionary statements

	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10376423

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	>= 10 - <= 25	13463-67-7
Silica, amorphous	>= 5 - <= 10	7631-86-9
Carbon black	> 0 - <= 0.3	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

ÀVIENT

G-219R CACTUS GREEN R HDPE



Version Number 1.0 Revision Date 10/05/2023

:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
: cute a :	clothing and shoes. Get medical attention if symptoms occur. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
cute a	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
:	and delayed
	No known significant effects or critical hazards.
:	No known significant effects or critical hazards.
:	No known significant effects or critical hazards.
:	No known significant effects or critical hazards.
:	No specific data.
entic	on and special treatment needed, if necessary
:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
:	No specific treatment.
:	No action shall be taken involving any personal risk or without suitable training.
	: : : : :

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO₂.

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 4 of 16 Print Date 10/06/2023

Unsuitable extinguishing media	:	None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions Methods and materials for containme	: ent a	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methous and materials for containing	ent a	nu cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023

ÀVIENT

Page 5 of 16 Print Date 10/06/2023

Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (2022-01-06) TWA 0.2 mg/m3 Form: respirable fraction, nanoscale particles TWA 2.5 mg/m3 Form: respirable fraction, finescale particles		
Silica, amorphous	NIOSH REL (1994-06-01) TWA 6 mg/m3		
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m3 OSHA PEL (1993-06-30) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 3.5 mg/m3		
5/16			

G-219R CACTUS GREEN R HDPE



Version Number 1.0 Revision Date 10/05/2023 Page 6 of 16 Print Date 10/06/2023

		NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m ³ ACGIH TLV (2010-12-06) TWA 3 mg/m3 Form: Inhalable fraction
Appropriate engineering controls Environmental exposure controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures Eye/face protection	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection Body protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be
Other skin protection	:	approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 7 of 16 Print Date 10/06/2023

Section 9. Physical and chemical properties

Appearance

Physical state Color Odor Odor threshold pH Melting point Boiling point Flash point	solid [Pellets.] GREEN Faint odor. Not available. Not available. Not available. Not available. Not applicable.
Burning time Burning rate Evaporation rate Flammability (solid, gas) Lower and upper explosive (flammable) limits	Not available. Not available. Not available. Not available. Lower: Not applicable. Upper: Not applicable.
Vapor pressure Vapor density	Not available. Not applicable.
Relative density Solubility Solubility in water	Not available. Not available. insoluble in water.
Partition coefficient: n- octanol/water Auto-ignition temperature	Not applicable. Not applicable.
Decomposition temperature SADT Viscosity	Not available. Not available. Dynamic: Not available. Kinematic: Not applicable.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 8 of 16 Print Date 10/06/2023

Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids.
		Oxidizer.
Hazardous decomposition	:	Under normal conditions of storage and use, hazardous decomposition
products		products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
Titanium oxide (TiO2)				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	Dusts and mists		-	
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Carbon black		-		•
	LD50 Oral	Rat	15,400 mg/kg	-

Conclusion/Summary

: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Silica	Eyes - Mild irritant	Rabbit	-	24 hrs	-
Conclusion/Summary					
Skin		ot fully tested.			
Eyes		ot fully tested.			
Respiratory	: Mixture.N	ot fully tested.			
<u>Sensitization</u>					
Conclusion/Summary Skin	• Mixturo N	ot fully tosted			
		ot fully tested. ot fully tested.			
Respiratory	: Mixture.N	ot fully tested.			
<u>Mutagenicity</u>					
Conclusion/Summary	: Mixture.N	ot fully tested.			
Carcinogenicity					

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023 Page 9 of 16 Print Date 10/06/2023

Conclusion/Summary : Mixture.Not fully tested.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium oxide (TiO2)	-	2B	-
Silica	-	3	-
Carbon black	-	2B	-

Reproductive toxicity

Conclusion/Summary	:	Mixture.Not fully tested.

:

Teratogenicity

Conclusion/Summary

Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Information on the likely routes of : Not available. **exposure**

Potential acute health effects

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure



G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023

ÀVIENT

Page 10 of 16 Print Date 10/06/2023

Potential immediate effects Potential delayed effects	Not available.Not available.
Long term exposure	
Potential immediate effects Potential delayed effects	Not available.Not available.
Potential chronic health effects	
Conclusion/Summary	: Mixture.Not fully tested.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects <u>Numerical measures of toxicity</u>	 No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Not available. Not available. No known significant effects or critical hazards.
<u>Acute toxicity estimates</u> N/A	
Other information	: This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium oxide (TiO2)			
	Acute LC50 > 1,000 Mg/l	Fish - Fundulus heteroclitus	96 h
	Marine water		
	Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia	48 h
		dubia	
	Acute LC50 6.5 Mg/l Fresh	Daphnia - Daphnia pulex	48 h
	water		
Carbon black			
	Acute EC50 37.563 Mg/l Fresh	Daphnia - Daphnia magna	48 h
	water		
	•		

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023

Page 11 of 16 Print Date 10/06/2023

G-219R CACTUS GREEN R H	DPE
Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.
Persistence and degradability	
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.
<u>Bioaccumulative potential</u> Not available.	
Mobility in soil	
Soil/water partition coefficie (KOC)	at : Not available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed



G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023

AVIENT

Page 12 of 16 Print Date 10/06/2023

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	: Not regulated for transportation.
International Air ICAO/IATA	: Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	: Not classified as dangerous goods under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	 United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a) - Proposed significant new use rules: Not listed United States - TSCA 5(a) - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Rutile, antimony chromium buff
	Chromium (III) oxide Phthalocyanine Blue United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Not listed
	12/16

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 13 of 16 Print Date 10/06/2023

United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b)	:	Listed
Hazardous Air Pollutants (HAPs) Clean Air Act Section 602 Class I	:	Not listed
Substances Clean Air Act Section 602 Class II	:	Not listed
Substances DEA List I Chemicals (Precursor	:	Not listed
Chemicals) DEA List II Chemicals (Essential		Not listed
Chemicals)	•	i tot listea

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

No products were found.

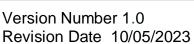
Name	%	Classification
Titanium oxide (TiO2)	>= 10 - <= 25	CARCINOGENICITY - Category 2
Silica	>= 5 - <= 10	EYE IRRITATION - Category 2B
Carbon black	> 0 - <= 0.3	CARCINOGENICITY - Category 2

SARA 313

Form R - Reporting requirements

Product name	CAS number	%
Rutile, antimony chromium buff	68186-90-3	>= 1 - < 5
Chromium (III) oxide	1308-38-9	>= 0.5 - < 1.5

G-219R CACTUS GREEN R HDPE





Page 14 of 16 Print Date 10/06/2023

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations		
Massachusetts	:	The following components are listed: Titanium dioxide Silica, amorphous Calcium carbonate Chromium (III) oxide
New York	:	None of the components are listed.
New Jersey	:	The following components are listed: Titanium dioxide Calcium carbonate Rutile, antimony chromium buff Chromium (III) oxide Carbon black
Pennsylvania	:	The following components are listed: Titanium dioxide
		Silica, amorphous
		Calcium carbonate
		Rutile, antimony chromium buff
		Chromium (III) oxide

California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Titanium dioxide	-	-
Carbon black	-	-

United States inventory (TSCA 8b)	:	All components are active or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
International regulations		

Internati	onal	regulations
Inventory	list	

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 15 of 16 Print Date 10/06/2023

Australia	:	Not determined.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): Not determined.
		Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Thailand	:	All components are listed or exempted.
Turkey	:	Not determined.
United States	:	All components are active or exempted.
Viet Nam	:	Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. <u>History</u>

Date of printing	:	10/06/2023
Date of issue/Date of revision	:	10/05/2023
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate
U C		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL = International Convention for the Prevention of Pollution From

G-219R CACTUS GREEN R HDPE

Version Number 1.0 Revision Date 10/05/2023



Page 16 of 16 Print Date 10/06/2023

Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations Not available.

References

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.