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SAFETY DATA SHEET

GEON A90UB GREEN 5221

Section 1. Identification		
GHS product identifier Chemical name	:	GEON A90UB GREEN 5221 Mixture
CAS number Other means of identification Product type	:	Mixture VC10008379 solid
<u>Relevant identified uses of the subs</u> Product use	tance :	e or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	GEON Performance Solutions LLC 25777 Detroit Road Suite 202, Westlake, Ohio 44145
Emergency telephone number (with hours of operation)	:	1-800-GET-GEON or 1-800-438-4366 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 for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions.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		

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Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
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	:	VC10008379

CAS number/other identifiers

Ingredient name	%	CAS number
Diundecyl phthalate	>= 10 - <= 25	3648-20-2
2-Hydroxy-4-n-octoxybenzophenone	>= 0.3 - <= 1	1843-05-6
Titanium dioxide	> 0 - <= 0.3	13463-67-7

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.





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Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects	<u>.</u>	
Eye contact	: 1	No known significant effects or critical hazards.
Inhalation		No known significant effects or critical hazards.
Skin contact	: 1	No known significant effects or critical hazards.
Ingestion	: 1	No known significant effects or critical hazards.
Over-exposure signs/sympto	ms	
Eye contact	: 1	No specific data.
Inhalation	: 1	No specific data.
Skin contact	: 1	No specific data.
Ingestion	: 1	No specific data.
Indication of immediate med	ical attention a	and special treatment needed, if necessary
Notes to physician		Freat symptomatically. Contact poison treatment specialist mmediately if large quantities have been ingested or inhaled

Specific treatments	:	immediately if large quantities have been ingested or inhaled. No specific treatment.
Protection of first-aiders	:	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 Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 . None known.
Specific hazards arising from the	:	No specific fire or explosion hazard.
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chemical Hazardous thermal decomposition products	:	May emit Hydrogen Chloride (HCl). Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds
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	:	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).
Methods and materials for containme	nt ai	nd 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.

Section 7. Handling and storage

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Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	:	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
Diundecyl phthalate	None.
2-Hydroxy-4-n-octoxybenzophenone	None.
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 (1996-05-18) TWA 10 mg/m3

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	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.



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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 e 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 liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates higher degree of protection: safety glasses with side-shields. 	ed eto
Skin protection		
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical productif a risk assessment indicates this is necessary.	
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	d
Other skin protection	: 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.	s
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator the 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.	

Section 9. Physical and chemical properties

Appearance

Physical state Color	:	solid [Pellets.] GREEN
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.

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Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
-		Kinematic: Not available.

Aerosol product

Heat of combustion Ignition distance Enclosed space ignition - Time	:	Not available. Not available. Not available.
equivalent Enclosed space ignition - Deflagration density	:	Not available.
Flame height Flame duration	:	Not available. Not available.

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).
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	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

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Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methanone, [2-hydroxy-4-(oc	tyloxy)phenyl]phenyl	-		
	LD50 Oral	Rat	10,000 mg/kg	-
	LD50 Dermal	Rabbit	10,000 mg/kg	-
Titanium oxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	Dusts and mists			
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-

Conclusion/Summary

: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Benzenedicarboxylic acid, 1,2-diundecyl ester	Eyes - Mild irritant	Rabbit	-		-
Titanium oxide	Skin - Mild irritant	Human	-	72 hrs	-

Conclusion/Summary	
Skin	: Mixture.Not fully tested.
Eyes	: Mixture.Not fully tested.
Respiratory	: Mixture.Not fully tested.
Sensitization	
Conclusion/Summary	
Skin	: Mixture.Not fully tested.
Respiratory	: Mixture.Not fully tested.
Mutagenicity	
Conclusion/Summary	: Mixture.Not fully tested.
Carcinogenicity	
Conclusion/Summary	: Mixture.Not fully tested.
Classifiestion	

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium oxide	-	2B	-

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Reproductive toxicity				
Conclusion/Summary	:	Mixture.Not fully tested.		
<u>Teratogenicity</u>				
Conclusion/Summary	:	Mixture.Not fully tested.		
Specific target organ toxicity (single exposure) Not available.				
Specific target organ toxicity (repear Not available.	<u>ted e</u>	exposure)		
Aspiration hazard Not available.				
Information on the likely routes of exposure	:	Not available.		
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 a	<u>also (</u>	chronic effects from short and long term exposure		
Short term exposure				
Potential immediate effects	:	Not available.		
Potential delayed effects	:	Not available.		
Long term exposure				
Potential immediate effects	:	Not available.		
Dotontial delayed offects		Not available		

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Potential chronic health effects

Conclusion/Summary	: Mixture.Not fully tested.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
<u>Numerical measures of toxicity</u> <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
1,2-Benzenedicarboxylic acid,	1,2-diundecyl ester		
	Acute EC50 12 Mg/l Fresh water	Daphnia - Daphnia magna	48 h
	Chronic NOEC 0.000059 Mg/l Fresh water	Daphnia - Daphnia magna	21 d
Titanium oxide			
	Acute LC50 > 1,000 Mg/l Marine water	Fish - Fundulus heteroclitus	96 h
	Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 h
	Acute LC50 6.5 Mg/l Fresh water	Daphnia - Daphnia pulex	48 h
GEON A90UB GREEN 5221			
Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available	e as they are bound within the po	lymer matrix.

Conclusion/Summary

Chemicals are not readily available as they are bound within the polymer matrix.

:

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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.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methanone, [2-hydroxy-4-	6	99.00	low
(octyloxy)phenyl]phenyl-			

Mobility in soil

Soil/water partition coefficient (KOC)	:	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

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

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Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules

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: Listed 1,2-
		Benzenedicarboxylic acid, dinonyl ester, branched and linear
		United States - TSCA 4(a) - ITC Priority list: Not listed
		United States - TSCA 4(a) - Proposed test rules: Not listed
		United States - TSCA 4(a) - Priority risk review: Not listed
		United States - TSCA 5(a)2 - Final significant new use rules:
		Listed 4-Nonylphenol, branched
		United States - TSCA 5(a)2 - 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) - Chemical Data Reporting (CDR): Not determined
		United States - TSCA 8(a) - Preliminary assessment report
		(PAIR): Listed 4-Nonylphenol, branched
		United States - TSCA 8(c) - Significant adverse reaction (SAR): 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 Phthalocyanine green
		2-Ethylhexanoic acid zinc salt
		10,10'-Oxybisphenoxarsine
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Zinc chloride (ZnCl2) Phenol Vinyl chloride monomer

United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Listed 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 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)		

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
1,2-Benzenedicarboxylic acid, 1,2-diundecyl ester	>= 10 - <= 25	EYE IRRITATION - Category 2B
Methanone, [2-hydroxy-4- (octyloxy)phenyl]phenyl-	>= 0.3 - <= 1	SKIN SENSITIZATION - Category 1
Titanium oxide	> 0 - <= 0.3	CARCINOGENICITY - Category 2

Not applicable.

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State regulations		
Massachusetts	:	None of the components are listed.
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:
		Ethene, chloro-, homopolymer Titanium dioxide
Pennsylvania	:	The following components are listed: Titanium dioxide

California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide, which is known to the State of California to cause cancer, and Diisodecyl phthalate (mixed isomers), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Diisodecyl phthalate (mixed isomers)	-	Yes.
Titanium dioxide	-	-

United States inventory (TSCA 8b) : All components are active or exempted. **Canada inventory** : All components are listed or exempted. **International regulations Inventory list** Australia All components are listed or exempted. : Canada All components are listed or exempted. : China All components are listed or exempted. : **Europe inventory** All components are listed or exempted. : Japan Not determined. : New Zealand : Not determined. Philippines Not determined. :

New Zealand:Not determined.Philippines:Not determined.Republic of Korea:All components are listed or exempted.Taiwan:Not determined.Turkey:Not determined.United States:All components are active or exempted.

Section 16. Other information

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



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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. History

History		
Date of printing	:	12/20/2024
Date of issue/Date of revision	:	11/03/2020
Date of previous issue	:	03/08/2019
Version	:	1.7
Key to abbreviations	:	ATE = Acute Toxicity Estimate
-		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
		Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		UN = United Nations
References	:	Not available.

Notice to reader

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