GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017 Page 1 of 14 Print Date 08/11/2017

SAFETY DATA SHEET

GEON SFDC203959-06 EXPWJJP625

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification	:	GEON SFDC203959-06 EXPWJJP625 Mixture Mixture VC10012001
Product type	:	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	:	POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012 1 (440) 930-1000 or 1 (866) POLYONE
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 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



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017

Page 2 of 14 Print Date 08/11/2017

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

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	VC10012001

CAS number/other identifiers

Ingredient name	%	CAS number
Bis(2-ethylhexyl) tetrabromophthalate	5 - 10	26040-51-7

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.



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0	Page 3 of 14
Revision Date 08/10/2017	Print Date 08/11/2017

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

Eye contact Inhalation Skin contact Ingestion	:	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.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical attention and special treatment needed, if necessary		

Notes to physician Specific treatments	 Treat symptomatically. Contact poison treatment specialist 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. Firefighting measures

Extinguishing media

Suitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 .
Unsuitable extinguishing media	:	None known.



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0	Page 4 of 14
Revision Date 08/10/2017	Print Date 08/11/2017

Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	May emit Hydrogen Chloride (HCl). Decomposition products may include the following materials: carbon dioxide carbon monoxide 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	:	Avoid dispersal of spilled material and runoff and contact with soi waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, so or air).	
Methods and materials for containme	ent a	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.	



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017

Page 5 of 14 Print Date 08/11/2017

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
Bis(2-ethylhexyl) tetrabromophthalate		
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.
Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0	Page 6 of 14
Revision Date 08/10/2017	Print Date 08/11/2017

Eye/face protection	:	 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	:	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.	
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.	
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.	
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.	

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	NO PIGMENT
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.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017

Page 7 of 14 Print Date 08/11/2017

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.

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

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.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Bis(2-ethylhexyl) tetrabromop	hthalate			
	LD50 Oral	Rat	5,000 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		

Irritation/Corrosion



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017

Page 8 of 14 Print Date 08/11/2017

Product/ingredient name	Result	Species	Score	Exposure	Observation
Bis(2-ethylhexyl)	Eyes - Mild	Rabbit			-
tetrabromophthalate	irritant				
	Skin - Mild	Rabbit			-
<i>a b b b b b b b b b b</i>	irritant				
Conclusion/Summary			11 / / 1		
Skin Evos		Iixture.Not fu Iixture.Not fu			
Eyes Respiratory		lixture.Not fu			
Respirator y	• 10.		my tested.		
Sensitization					
Conclusion/Summary					
Skin		lixture.Not fu			
Respiratory	: N	lixture.Not fu	lly tested.		
Mutagenicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Carcinogenicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Reproductive toxicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Teratogenicity					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Specific target organ toxicit	y (single exposu	ire)			
Not available.					
Specific target organ toxicit Not available.	y (repeated exp	<u>osure)</u>			
Aspiration hazard Not available.					
Information on likely routes exposure	of : N	ot available.			
Potential acute health effects					



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017 Page 9 of 14 Print Date 08/11/2017

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 as well as chronic effects from short and long-term exposure

<u>Short</u>	term	exposure

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	:	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.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017 Page 10 of 14 Print Date 08/11/2017

Toxicity

Product/ingredient name	Result	Species	Exposure			
Bis(2-ethylhexyl) tetrabromophthalate						
	Acute LC50 0.91 mg/l Fresh water	Aquatic invertebrates.	48 h			
		Daphnia				
GEON SFDC203959-06 EXPV	WJJP625					
Remarks - Acute - Aquatic	Chemicals are not readily available	as they are bound within the	e polymer matrix.			
invertebrates.:						
Conclusion/Summary	: Chemicals are not read polymer matrix.	lily available as they are bou	nd within the			
Persistence and degradability	<u>v</u>					
Conclusion/Summary	: Chemicals are not read polymer matrix.	ily available as they are bou	nd within the			
Conclusion/Summary	: Chemicals are not read polymer matrix.	ily available as they are bou	nd within the			
Bioaccumulative potential <u>Mobility in soil</u>						
Soil/water partition coefficie (KOC)	ent : Not available.					
Other adverse effects	: No known significant of	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.



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017 Page 11 of 14 Print Date 08/11/2017

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

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	:	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: 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 5(a)2 - Final significant new use rules: Not listed
		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): 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 - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Vinyl chloride monomer Zinc



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0	Page 12 of 14
Revision Date 08/10/2017	Print Date 08/11/2017

aluminium magnesium zinc carbonate hydroxide Zinc borate

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

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

Name	%	Classification
Bis(2-ethylhexyl)	5 - 10	AH
tetrabromophthalate		

SARA 313

	Product name	CAS number	%
Form R - Reporting	aluminium magnesium zinc	169314-88-9	1 - 5
requirements	carbonate hydroxide		
	Zinc borate	1332-07-6	1 - 5
Supplier notification	Zinc borate	1332-07-6	1 - 5
	aluminium magnesium zinc	169314-88-9	1 - 5



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017

Page 13 of 14 Print Date 08/11/2017

ca	rbona	te hydroxide		
SARA 313 notifications must not be o		any copying and redistrib	ution of the SDS shall	
include copying and redistribution of				
State normations				
<u>State regulations</u> Massachusetts	:	None of the compone	ante ara listad	
New York		The following compo		
	•	Zinc borate	shents are listed.	
New Jersey	:	The following compo	onents are listed.	
itew beisey	•		um zinc carbonate hydro:	xide
		Zinc borate		
		Ethene, chloro-, hor	nopolymer	
Pennsylvania	:	The following comp		
·		Zinc borate		
		Aluminum hydroxi	de	
		aluminium magnesi	um zinc carbonate hydro:	xide
<u>California Prop. 65</u>				
This product may contain a trace (<0.	001%) amount of a chemica	l known to the State of C	alifornia to cause cancer.
United States inventory (TSCA 8b)		All components are	isted or exempted	
child States inventory (1501106)	•	i in components are	instea of exempted.	
Canada inventory	:	At least one compon	ent is not listed in DSL b	ut all such components
		are listed in NDSL.		
International regulations				
<u>International regulations</u>				
Inventory list				
Australia	:	Not determined.		
Canada			nent is not listed in DSL b	out all such components
		are listed in NDSL.		I I I
China	:	Not determined.		
Europe inventory	:	Not determined.		
Japan	:	Not determined.		
New Zealand	:	Not determined.		
Philippines	:	Not determined.		
Republic of Korea	:	Not determined.		
Taiwan	:	Not determined.		
Turkey	:	Not determined.		
United States	:	All components are	listed or avamented	



GEON SFDC203959-06 EXPWJJP625

Version Number 1.0 Revision Date 08/10/2017 Page 14 of 14 Print Date 08/11/2017

Section 16. Other information

Hazardous Material Information System (U.S.A.) :			
Health	*	1	
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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

<u>History</u>		
Date of printing	:	08/11/2017
Date of issue/Date of revision	:	08/10/2017
Date of previous issue	:	00/00/0000
Version	:	1.0
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 = International Air Transport Association IBC = 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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