

Version Number 1.1 Revision Date 02/26/2015 Page 1 of 15 Print Date 02/27/2015

SAFETY DATA SHEET

GeonTM VBX3621 Low Density Black PVC

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification Product type		Geon [™] VBX3621 Low Density Black PVC Mixture Mixture FO20029818 solid
<u>Relevant identified uses of the subst</u> Product use	ance:	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	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	COMBUSTIBLE DUSTS CARCINOGENICITY - Category 2
Supplemental label elements Hazards not otherwise classified	:	Keep container tightly closed. Fine dust clouds may form explosive mixtures with air. Handling



Version Number 1.1 Revision Date 02/26/2015 Page 2 of 15 Print Date 02/27/2015

and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	FO20029818

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	0.1 - 1	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. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.



Version Number 1.1	Page 3 of 15
Revision Date 02/26/2015	Print Date 02/27/2015

Ingestion:Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person
feels sick as vomiting may be dangerous. Do not induce vomiting
unless directed to do so by medical personnel. If vomiting occurs, the
head should be kept low so that vomit does not enter the lungs. Get
medical attention. Never give anything by mouth to an unconscious
person. If unconscious, place in recovery position and get medical
attention immediately. Maintain an open airway. Loosen tight clothing
such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

<u>I otentiai acute neatin enects</u>		
Eye contact	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	:	Adverse symptoms may include the following: irritation redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)



Version Number 1.1 Revision Date 02/26/2015 Page 4 of 15 Print Date 02/27/2015

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	Use dry chemical powder. Do not use water jet.
Specific hazards arising from the chemical	:	Fine dust clouds may form explosive mixtures with air.
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire- exposed containers cool.
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	:	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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised 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).



Version Number 1.1 Revision Date 02/26/2015

Page 5 of 15 Print Date 02/27/2015

Methods and materials for containment and cleaning up

Small spill	: Move containers from spill area. Use spark-proof tools and explosion- proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Use spark-proof tools and explosion- proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. 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

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
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.



Version Number 1.1	Page 6 of 15
Revision Date 02/26/2015	Print Date 02/27/2015

 Conditions for safe storage, including any incompatibilities
 Store in accordance with local regulations. Store in a segregated and approved area. 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. Store in a well-ventilated place. Eliminate all ignition sources. Separate from oxidizing materials. 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
Carbon black	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 3.5 mg/m3
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 3.5 mg/m3
	NIOSH REL (1994-06-01)
	Time Weighted Average (TWA) 3.5 mg/m3
	Time Weighted Average (TWA)
	ACGIH TLV (2010-12-06)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction
Appropriate engineering controls : Environmental exposure controls :	fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of
Individual protection measures	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.

6/15



Version Number 1.1	Page 7 of 15
Revision Date 02/26/2015	Print Date 02/27/2015

Hygiene measures	: 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.
Eye/face protection	 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. If operating conditions cause high dust concentrations to be produced, use dust goggles.
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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
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	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state :	solid [Powder.]
Color :	BLACK

<u>PolyOne</u>

Version Number 1.1 Revision Date 02/26/2015

Page 8 of 15 Print Date 02/27/2015

Odor	:	Not available.
Odor threshold	:	Not available.
pH	:	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.
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	:	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing. Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition	:	Under normal conditions of storage and use, hazardous decomposition



Version Number 1.1 Revision Date 02/26/2015 Page 9 of 15 Print Date 02/27/2015

products

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
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-
Conclusion/Summary	: Mi	xture.Not fully t	ested.	
Irritation/Corrosion				
Conclusion/Summary				
Skin	: Mi	xture.Not fully t	ested.	
Eyes	: Mi	xture.Not fully t	ested.	
Respiratory	: Mi	xture.Not fully t	ested.	
<u>Sensitization</u>				
Conclusion/Summary				
Skin		xture.Not fully t		
Respiratory	: Mi	ixture.Not fully t	tested.	
Mutagenicity				
Conclusion/Summary	: Mi	xture.Not fully t	ested.	
Carcinogenicity				
Conclusion/Summary	: Mi	xture.Not fully t	ested.	
<u>Classification</u>				
Product/ingredient name	OSHA	IARC	NTP	
Carbon black		2B		
Reproductive toxicity				
Conclusion/Summary	: Mi	xture.Not fully t	ested.	
		9/15		

PolyOne.

Version Number 1.1 Revision Date 02/26/2015 Page 10 of 15 Print Date 02/27/2015

Teratogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (single Not available.	e exp	osure)
Specific target organ toxicity (repeated Not available.	<u>ted e</u>	<u>xposure)</u>
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical, ch	nemio	cal and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: irritation
Inhalation	:	redness Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Delayed and immediate effects and a	ilso c	hronic effects from short and long term exposure
Short term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		



Version Number 1.1 Revision Date 02/26/2015

Page 11 of 15 Print Date 02/27/2015

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity	:	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
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.

Acute toxicity estimates

Not available.

Section 12. Ecological information

0		
<u>Toxicity</u>		
Conclusion/Summary	:	Not available.
Persistence and degradability		
Conclusion/Summary	:	Not available.
Bioaccumulative potential <u>Mobility in soil</u>		
Soil/water partition coefficient (KOC)	:	Not available.
Other adverse effects	:	No known significant effects or critical hazards.



Version Number 1.1 Revision Date 02/26/2015

Page 12 of 15 Print Date 02/27/2015

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

Section 14. Transport information

U.S. DOT Classification	: Not regulated for transportation.
ICAO/IATA	: Consult mode specific transport rules
IMO/IMDG (maritime)	: 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, di-C8-10-branched alkyl esters, C9-rich
		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:



Version Number 1.1 Revision Date 02/26/2015

Page 13 of 15 Print Date 02/27/2015

		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(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 Zinc stearate Miscellaneous Zinc Compounds Vinyl chloride monomer 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 - Flammable substances: Not 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) Hazardous Air Pollutants (HAPs)	:	Not listed		
Clean Air Act Section 602 Class I Substances	:	Not listed		
Clean Air Act Section 602 Class II Substances	:	Not listed		
DEA List I Chemicals (Precursor Chemicals)	:	Not listed		
DEA List II Chemicals (Essential Chemicals)	:	Not listed		
US EDA CEDCI A Harandana Substances (40 CED 202)				

US. EPA CERCLA Hazardous Substances (40 CFR 302)

:

not applicable

SARA 311/312

Classification

Fire hazard Delayed (chronic) health hazard



Version Number 1.1 Revision Date 02/26/2015 Page 14 of 15 Print Date 02/27/2015

Composition/information on ingredients

Name	%		Classification		
Carbon black	0.1	- 1	СН		
<u>SARA 313</u> Not applicable.					
State regulations					
Massachusetts	:	None of the components are listed	d.		
New York	:	None of the components are listed	d.		
New Jersey	:	The following components are list	sted:		
Pennsylvania	:	Ethene, chloro-, homopolymer Carbon black The following components are lis Carbon black	sted:		
<u>California Prop. 65</u> WARNING: This product contains a chemical known to the State of California to cause cancer.					
United States inventory (TSCA 8b)	:	All components are listed or exer	npted.		
Canada inventory	:	Not determined.			
International regulations					
International lists	:	Australia inventory (AICS): N Taiwan inventory (CSNN): No Malaysia Inventory (EHS Regis EINECS: All components are lis Japan inventory: Not determin China inventory (IECSC): Not Korea inventory: Not determin New Zealand Inventory of Che Philippines inventory (PICCS):	ot determined. ster): Not determined. sted or exempted. ed. t determined. ed. micals (NZIoC): Not determined.		
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed			
Chemical Weapons Convention List Schedule II Chemicals	:	Not listed			
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed			



Version Number 1.1 Revision Date 02/26/2015

Page 15 of 15 Print Date 02/27/2015

Section 16. Other information

<u>History</u>		
Date of printing	:	02/27/2015
Date of issue/Date of revision	:	02/26/2015
Date of previous issue	:	06/28/2012
Version	:	1.1
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 $73/78$ = 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

TT:

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.