Version Number 1.4 Revision Date 01/07/2020



Page 1 of 14 Print Date 01/08/2020

SAFETY DATA SHEET

GEON BIO RB4D01 NATURAL 0000

Section 1. Identification	on	
GHS product identifier Chemical name CAS number Other means of identification	:	GEON BIO RB4D01 NATURAL 0000 Mixture Mixture VC10009737
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	tance :	or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	GEON Performance Solutions LLC 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

Version Number 1.4 Revision Date 01/07/2020



Page 2 of 14 Print Date 01/08/2020

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.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	VC10009737

CAS number/other identifiers

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

There are no 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.
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.





Page 3 of 14
Print Date 01/08/2020

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	:	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.

:

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 Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 . None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal	:	May emit Hydrogen Chloride (HCl).
decomposition products		Decomposition products may include the following materials: carbon dioxide
		3/14



Version Number 1.4 Revision Date 01/07/2020 Page 4 of 14 Print Date 01/08/2020

		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.

1

• 1

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
For emergency responders	:	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 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.

Section 7. Handling and storage

:

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8).



Version Number 1.4	Page 5 of 14
Revision Date 01/07/2020	Print Date 01/08/2020

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 None.		
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 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.

Version Number 1.4 Revision Date 01/07/2020



Page 6 of 14

Print Date 01/08/2020

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.
Lower and upper explosive (flammable) limits	:	Lower: Not available. Upper: Not available.
	:	
(flammable) limits	:	Upper: Not available.
(flammable) limits Vapor pressure	:	Upper: Not available. Not available.
(flammable) limits Vapor pressure Vapor density	:	Upper: Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density	:	Upper: Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility	:	Upper: Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water	:	Upper: Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n-	:	Upper: Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available.

Version Number 1.4 Revision Date 01/07/2020



Page 7 of 14 Print Date 01/08/2020

Viscosity	:	Dynamic: Not available. Kinematic: Not available.
Aerosol product		
Heat of combustion	:	Not available.
Ignition distance	:	Not available.
Enclosed space ignition - Time equivalent	:	Not available.
Enclosed space ignition -	:	Not available.
Deflagration density		
Flame height	:	Not available.
Flame duration	:	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 Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Conclusion/Summary		
Skin	:	Mixture.Not fully tested.

Version Number 1.4 Revision Date 01/07/2020 Page 8 of 14 Print Date 01/08/2020

Eyes	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.
<u>Sensitization</u>		
Conclusion/Summary		
Skin	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.
<u>Mutagenicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Carcinogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
<u>Reproductive toxicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Teratogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (sing Not available.	le exp	<u>oosure)</u>
Specific target organ toxicity (rependent) Not available.	eated	exposure)
Aspiration hazard Not available.		
Information on 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,	chem	ical and toxicological characteristics



Version Number 1.4 Revision Date 01/07/2020

Page 9 of 14 Print Date 01/08/2020

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 term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazard
Carcinogenicity	:	No known significant effects or critical hazard
Mutagenicity	:	No known significant effects or critical hazard
Teratogenicity	:	No known significant effects or critical hazard
Developmental effects	:	No known significant effects or critical hazard
Fertility effects	:	No known significant effects or critical hazard
Numerical magazing of tonicity		

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure		
GEON BIO RB4D01 NATURAL 0000					
Remarks - Acute - Aquatic	Chemicals are not readily available as they are bound within the polymer matrix.				
		•			



ds. ds.

Version Number 1.4 Revision Date 01/07/2020

Page 10 of 14 Print Date 01/08/2020

• • • •		
invertebrates.:		
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.
Bioaccumulative potential Not available.		
<u>Mobility in soil</u>		
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

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water : Not regulated for transportation.

10/14



Version Number 1.4 Revision Date 01/07/2020



Page 11 of 14 Print Date 01/08/2020

International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules

Section 15. Regulatory information

of the components are listed. United States - TSCA 4(a) - ITC Priority list: 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 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not
United States - TSCA 5(a)2 - Final significant new use rules: Not
e e
nstea
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 8(a) - Chemical risk rules: Not listed
United States - TSCA 8(a) - Chemical TSK Fues. Not insted
United States - TSCA 8(a) - Dioann'r II and precusor. Not insted United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not
determined
United States - TSCA 8(a) - Preliminary assessment report
(PAIR): Listed Poly(oxy-1,2-ethanediyl), .alpha(4-
nonylphenyl)omegahydroxy-,branched
nonyipnenyi)omeganyuroxy-,orancheu
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 4(a) - Final Test Rules: Not listed
United States - TSCA 4(a) - Proposed test rules: Not listed
United States - TSCA 6 - Proposed risk management: Not listed
United States - EPA Clean water act (CWA) section 307 - Priority
pollutants: Listed Vinyl chloride monomer Phenol
Zinc chloride (ZnCl2)
United States EDA Clean mater act (CWA) section 211
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

Version Number 1.4 Revision Date 01/07/2020



Page 12 of 14 Print Date 01/08/2020

		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

No products were found.

Not applicable.

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		
		Calcium carbonate		
Pennsylvania	:	The following components are listed:		
-		Calcium carbonate		
California Prop. 65				
This product does not require a Safe Harbor warning under California Prop. 65.				
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.		

Version Number 1.4 Revision Date 01/07/2020 Page 13 of 14 Print Date 01/08/2020

GEO

Performance Solutions

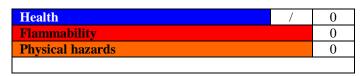
International regulations

Inventory list

Australia Canada	:	Not determined. At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	Not determined.
Europe inventory	:	All components are listed or exempted.
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 active or exempted.

Section 16. Other information

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



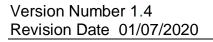
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose 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

<u>IIIStol y</u>		
Date of printing	:	01/08/2020
Date of issue/Date of revision	:	01/07/2020
Date of previous issue	:	08/30/2019
Version	:	1.4
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

GEON Performance Solutions LLC

SAFETY DATA SHEET GEON BIO RB4D01 NATURAL 0000





Page 14 of 14 Print Date 01/08/2020

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 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.