

Geon[™] DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0 Revision Date 02/29/2016

SAFETY DATA SHEET

Geon[™] DB4822B USP NAVY BLUE NON-PHTH

Section 1. Identification				
GHS product identifier Chemical name CAS number Other means of identification Product type	:::::::::::::::::::::::::::::::::::::::	Geon™ DB4822B USP NAVY BLUE NON-PHTH Mixture Mixture FO20037545 liquid		
<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. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. 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.

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	SKIN SENSITIZATION - Category 1
GHS label elements		



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 2 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	May cause an allergic skin reaction.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Wear protective gloves. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace.
Response	:	IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
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	:	FO20037545

CAS number/other identifiers

Ingredient name	%	CAS number
Bisphenol A - Epichlorohydrin polymer	1 - 3	25068-38-6

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.



Geon[™] DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0 Revision Date 02/29/2016

Page 3 of 15 Print Date 03/01/2016

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 if irritation occurs.
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 adverse health effects persist or are severe. 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	:	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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 if adverse health effects persist or are severe. 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

Over-exposure signs/symptoms

Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.

3/15



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 4 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

Eye contact Inhalation	No specific data.No specific data.	
Skin contact	: Adverse symptoms may include the followi irritation redness	ng:
Ingestion	: No specific data.	
Indication of immediate medica	ention and special treatment needed, if necessar	Y
Notes to physician	: Treat symptomatically. Contact poison treat immediately if large quantities have been in	1
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any perso suitable training. It may be dangerous to the give mouth-to-mouth resuscitation. Wash co thoroughly with water before removing it, o	e person providing aid to ontaminated clothing

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 $\rm CO_2$. None known.
Specific hazards arising from the chemical Hazardous thermal decomposition products	:	In a fire or if heated, a pressure increase will occur and the container may burst. 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



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 5 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. 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).
Methods and materials for containme	ent ai	nd cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made

same hazard as the spilled product. Note: see Section 1 for emergency

contact information and Section 13 for waste disposal.



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0 Revision Date 02/29/2016	Page 6 of 15 Print Date 03/01/2016
Advice on general occupational hygiene	 from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. 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
Bisphenol A - Epichlorohydrin polymer	
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. Contaminated work clothing should not be allowed out of the workplace. Wash
	6/15



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 7 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

Eye/face protection	÷	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. 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, air-purifying or air-fed 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	: liquid [liquid]
Color	BLUE
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.
Boiling point Flash point	Not available.Not available.



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0					
Revision Date	02/29/2016				

Page 8 of 15 Print Date 03/01/2016

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.
v		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
Bisphenol A - Epichlorohydrin	polymer			
	LD50 Oral	Rat	13,600 mg/kg	-



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0 Revision Date 02/29/2016

Page 9 of 15 Print Date 03/01/2016

LD5	O Oral	Rat	11,400 mg/kg	-
LD5	O Oral	Rat	11,400 mg/kg	-
LD5	O Oral	Rat	30,000 mg/kg	-
LD5	O Oral	Rat	30,000 mg/kg	-
LD5	O Oral	Rat	30,000 mg/kg	-
LD5	O Oral	Rat	30,000 mg/kg	-
LD5	O Oral	Rat	13,600 mg/kg	-

Conclusion/Summary

: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation		
Bisphenol A -	Eyes - Mild	Rabbit			-		
Epichlorohydrin polymer	irritant						
	Eyes - Mild	Rabbit			-		
	irritant						
	Skin -	Rabbit		24 hrs	-		
	Moderate						
	irritant						
	Skin - Severe	Rabbit		24 hrs	-		
	irritant						
	Eyes - Mild	Rabbit			-		
	irritant						
Conclusion/Summary							
Skin		ixture.Not ful					
Eyes	: Mixture.Not fully tested.						
Respiratory	: Mixture.Not fully tested.						
Sensitization							
Conclusion/Summary							
Skin	: M	ixture.Not ful	ly tested.				
Respiratory	: M	ixture.Not ful	ly tested.				
Mutagenicity							
Conclusion/Summary	: Mixture.Not fully tested.						
Carcinogenicity							
Conclusion/Summary	: M	ixture.Not ful	ly tested.				
<u>Reproductive toxicity</u>							
Conclusion/Summary	: M	ixture.Not ful	ly tested.				



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0 Revision Date 02/29/2016 Page 10 of 15 Print Date 03/01/2016

<u>Teratogenicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (single Not available.	<u>e exp</u>	<u>oosure)</u>
Specific target organ toxicity (repear Not available.	ated (<u>exposure)</u>
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact Inhalation Skin contact Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards. May cause an allergic skin reaction. No known significant effects or critical hazards.
Symptoms related to the physical, c	hemi	cal and toxicological characteristics
Eye contact Inhalation Skin contact	:	No specific data. No specific data. Adverse symptoms may include the following: irritation
Ingestion	:	redness No specific data.
Delayed and immediate effects and	also (chronic effects from short and long term exposure
Short 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		



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0				
Revision Date 02/29/2016				

Page 11 of 15 Print Date 03/01/2016

Conclusion/Summary	: Mixture.Not fully tested.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
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

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Bisphenol A -	2.64 - 3.78	31.00	low
Epichlorohydrin polymer			

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations



Geon[™] DB4822B USP NAVY BLUE NON-PHTH

:

Version Number 1.0	Page 12 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

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: 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



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 13 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

		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 2-Ethylhexanoic acid zinc salt Phthalocyanine Blue Titanium dioxide Phenol
		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) 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. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

: Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Classification
Bisphenol A - Epichlorohydrin	1 - 3	AH
polymer		



Geon™ DB4822B USP NAVY BLUE NON-PHTH

Version Number 1.0	Page 14 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

SARA 313 Not applicable.

State regulationsMassachusettsNew YorkNew JerseyPennsylvaniaCalifornia Prop. 65This product may contain a trace (<0.0	: : : :001%	None of the components are listed. None of the components are listed. The following components are listed: Ethene, chloro-, homopolymer None of the components are listed.) amount of a chemical known to the State of California to cause cancer.
United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
International lists	:	 Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): Not determined.
Chemical Weapons Convention List Schedule I Chemicals Chemical Weapons Convention List Schedule II Chemicals Chemical Weapons Convention List Schedule III Chemicals	: : :	Not listed Not listed Not listed

Section 16. Other information

<u>History</u>		
Date of printing	:	03/01/2016
Date of issue/Date of revision	:	02/29/2016
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate



Geon[™] DB4822B USP NAVY BLUE NON-PHTH

:

Version Number 1.0	Page 15 of 15
Revision Date 02/29/2016	Print Date 03/01/2016

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 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.