#### Geon<sup>™</sup> DB4864 PDM Red 9166 LC

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# SAFETY DATA SHEET

#### Geon<sup>TM</sup> DB4864 PDM Red 9166 LC

Section 1. Identificatio	n	
GHS product identifier		Geon <sup>™</sup> DB4864 PDM Red 9166 LC
Chemical name		Mixture
CAS number	:	Mixture
Other means of identification	:	FO20029233
Product type	:	liquid
		-
Relevant identified uses of the subst	ance	or mixture and uses advised against
Product use	:	Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
<b>Emergency telephone number</b> (with hours of operation)	:	<b>CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).</b> 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. 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	:	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B SKIN SENSITIZATION - Category 1

#### **GHS label elements**



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Hazard pictograms	:	
Signal word Hazard statements	:	Warning Causes eye irritation. May cause an allergic skin reaction.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: 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	:	FO20029233

#### CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	30 - 60	68515-48-0
Lead oxide sulfate (Pb4O3(SO4))	1 - 5	12202-17-4
Antimony trioxide	1 - 5	1309-64-4



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Bisphenol A - Epichlorohydrin polymer	0.1 - 1	25068-38-6
Titanium dioxide	0.1 - 1	13463-67-7

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

**Description of necessary first aid measures** 

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, 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 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

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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

#### Potential acute health effects

Eye contact Inhalation Skin contact Ingestion	::	Causes eye irritation. No known significant effects or critical hazards. May cause an allergic skin reaction. May be irritating to mouth, throat and stomach.
<b>Over-exposure signs/symptoms</b>		
Eye contact	:	Adverse symptoms may include the following: irritation watering redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
Indication of immediate medical atte	entio	n 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### Extinguishing media



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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 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 sulfur oxides halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters Special protective equipment 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. 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. 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 containment and 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
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Large spill

#### contractor.

: 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 same hazard as the spilled product. 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). 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 from a compatible material, kept tightly closed when not in use. 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.
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**



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Ingredient name	Exposure limits
Lead oxide sulfate (Pb4O3(SO4))	OSHA PEL 1989 (1989-03-01) measured as Pb PEL: Permissible Exposure Level 0.05 mg/m3 ACGIH TLV (1995-05-23) measured as Pb TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 0.05 mg/m3
Antimony trioxide	OSHA PEL (1993-06-30) expressed as Sb PEL: Permissible Exposure Level 0.5 mg/m3 NIOSH REL (1994-06-01) expressed as Sb Time Weighted Average (TWA) 0.5 mg/m3 OSHA PEL 1989 (1989-03-01) expressed as Sb PEL: Permissible Exposure Level 0.5 mg/m3 ACGIH TLV (1994-09-01)
Titanium dioxide	OSHA PEL 1989 (1989-03-01)PEL: Permissible Exposure Level 10 mg/m3 Form: Total dustOSHA PEL (1993-06-30)PEL: Permissible Exposure Level 15 mg/m3 Form: Total dustNIOSH REL (1994-06-01)ACGIH TLV (1996-05-18)TLV-TWA: Threshold Limit Value - Time weighted average PEL:Permissible Exposure Level 10 mg/m3
Appropriate engineering controls Environmental exposure controls	<ul> <li>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</li> <li>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.</li> </ul>
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
	contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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		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: chemical splash 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, 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	:	RED
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.



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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	:	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
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich				
	LD50 Oral	Rat	10,000 mg/kg	-
Lead oxide sulfate (Pb4O3(SO4))				
Antimony trioxide				
	LD50 Oral	Rat	34,000 mg/kg	-



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#### Bisphenol A - Epichlorohydrin polymer

	r · ·		T · J ·			
			LD50 Oral	Rat	13,600 mg/kg	-
			LD50 Oral	Rat	11,400 mg/kg	-
			LD50 Oral	Rat	11,400 mg/kg	-
			LD50 Oral	Rat	30,000 mg/kg	-
			LD50 Oral	Rat	30,000 mg/kg	-
			LD50 Oral	Rat	30,000 mg/kg	-
			LD50 Oral	Rat	30,000 mg/kg	-
			LD50 Oral	Rat	13,600 mg/kg	-
Tit	anium dioxide					
			LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
			LD50 Dermal	Rabbit	> 5,000 mg/kg	-
C	onclusion/Su	nmarv	• Mixtu	re Not fully tested		

**Conclusion/Summary** 

Mixture.Not fully tested. :

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Benzenedicarboxylic	Eyes - Mild	Rabbit			-
acid, di-C8-10-branched	irritant				
alkyl esters, C9-rich					
Antimony trioxide	Eyes - Mild	Rabbit			-
	irritant				
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	:	Mixture.Not fully tested.
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.

#### **Mutagenicity**



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Carcinogenicity         Conclusion/Summary       :       Mixture.Not fully tested.         Product/ingredient       OSHA       IARC       NTP         Iname       Reasonably anticipated to be a human carcinogen.       (Pb403(S04))       Image: Carcinogen Carcinogen.         Image: Carcinogenicity       Reasonably anticipated to be a human carcinogen.       (Pb403(S04))       Image: Carcinogenicity         Conclusion/Summary       :       Mixture.Not fully tested.       Image: Carcinogenicity         Conclusion/Summary       :       Mixture.Not fully tested.       Image: Carcinogenicity         Conclusion/Summary       :       Mixture.Not fully tested.       Image: Carcinogenicity         Specific target organ toxicity (single exposure) Not available.       Not available.       Image: Carcinogenicity         Specific target organ toxicity (repeated exposure) Not available.       Not available.       Image: Carcinogenicity         Eye contact       :       Not available.       Image: Carcinogenicity         Eye contact       :       Causes eye irritation.       Image: Causes eye irritation.         Inhalation       :       Not available.       Image: Causes eye irritation.         Specific target organ is in Not available.       May cause an allergic skin reaction.       Image: Causes eye irritation to mouth, throat and stomach. <th>Conclusion/Summary</th> <th>:</th> <th>Mixture.Not fu</th> <th>lly tested.</th>	Conclusion/Summary	:	Mixture.Not fu	lly tested.
Classification       OSHA       IARC       NTP         Lead oxide sulfate	<b>Carcinogenicity</b>			
Product/ingredient name         OSHA         IARC         NTP           Lead oxide sulfate         Reasonably anticipated to be a human carcinogen.         (Pbd/O3(SO4))         Reasonably anticipated to be a human carcinogen.           Antimony trioxide         2B         Reproductive toxicity         Reasonably anticipated to be a human carcinogen.           Antimony trioxide         2B         Reproductive toxicity         Reasonably anticipated to be a human carcinogen.           Reproductive toxicity         2B         Reasonably anticipated to be a human carcinogen.         Reasonably anticipated to be a human carcinogen.           Reproductive toxicity         2B         Reasonably anticipated to be a human carcinogen.         Reasonably anticipated to be a human carcinogen.           Reproductive toxicity         2B         Reasonably anticipated to be a human carcinogen.         Reasonably anticipated to be a human carcinogen.           Reproductive toxicity         2B         Reasonably anticipated to be a human carcinogen.         Reasonably anticipated to be a human carcinogen.           Conclusion/Summary         :         Mixture.Not fully tested.         Reasonably anticipated to be a human carcinogen.           Specific target organ toxicity (repeated exposure)         Not available.         Specific target organ toxicity (repeated exposure)           Not available.         Specific target organ toxicity (repeated exposure)         Not availabl		:	Mixture.Not fu	lly tested.
name       Reasonably anticipated to be a human carcinogen.         Lead oxide sulfate       Reasonably anticipated to be a human carcinogen.         Antimony trioxide       2B         Titanium dioxide       2B         Reproductive toxicity       2B         Conclusion/Summary       Mixture.Not fully tested.         Teratogenicity       Conclusion/Summary         Conclusion/Summary       Mixture.Not fully tested.         Specific target organ toxicity (single exposure)         Not available.         Specific target organ toxicity (repeated exposure)         Not available.         Aspiration hazard         Not available.         Potential acute health effects         Eye contact       :         Causes eye irritation.         Inhalation       :         No known significant effects or critical hazards.         Skin contact       :         May cause an allergic skin reaction.         Ingestion       :         May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         Reasonable acute health effects         Eye contact       :         May be irritating to mouth, thro		OCILA	LADC	NTD
Lead oxide sulfate       Reasonably anticipated to be a human carcinogen.         (Ph4O3(SO4))       2B         Antimony trioxide       2B         Titanium dioxide       2B         Reproductive toxicity       2B         Conclusion/Summary       :         Mixture.Not fully tested.         Teratogenicity         Conclusion/Summary       :         Mixture.Not fully tested.         Specific target organ toxicity (single exposure)         Not available.         Specific target organ toxicity (repeated exposure)         Not available.         Specific target organ toxicity (repeated exposure)         Not available.         Information on the likely routes of :       Not available.         Eye contact       :       Causes eye irritation.         Inhalation       :       No known significant effects or critical hazards.         Skin contact       :       May be irritation.         Ingestion       :       May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics       Eye contact         Eye contact       :       Adverse symptoms may include the following: irritation watering	0	USHA	IAKC	NIF
(Pb4O3(SO4))       2B         Antimony trioxide       2B         Titanium dioxide       2B         Reproductive toxicity       2B         Conclusion/Summary       :         Mixture.Not fully tested.       Teratogenicity         Conclusion/Summary       :       Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.       Not available.         Specific target organ toxicity (repeated exposure) Not available.       Not available.         Aspiration hazard Not available.       Information on the likely routes of : Not available.         exposure       :       Not available.         Potential acute health effects       :       Causes eye irritation.         Inhalation       :       No known significant effects or critical hazards.         Skin contact       :       May cause an allergic skin reaction.         Ingestion       :       May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics       Eye contact         :       :       Adverse symptoms may include the following: irritation watering				Reasonably anticipated to be a human carcinogen
Antimony trioxide       2B         Titanium dioxide       2B         Reproductive toxicity       2B         Conclusion/Summary       :         Mixture.Not fully tested.         Teratogenicity         Conclusion/Summary       :         Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.         Specific target organ toxicity (repeated exposure) Not available.         Specific target organ toxicity (repeated exposure) Not available.         Information nazard Not available.         Potential acute health effects         Eye contact       :         No konown significant effects or critical hazards.         Skin contact       :         May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         :       :         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         :       :         :       :         : <td></td> <td></td> <td></td> <td>reasonably anticipated to be a numan caremogen.</td>				reasonably anticipated to be a numan caremogen.
Titanium dioxide       2B         Reproductive toxicity       Conclusion/Summary       : Mixture.Not fully tested.         Teratogenicity       Conclusion/Summary       : Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.       Not available.         Specific target organ toxicity (repeated exposure) Not available.       Not available.         Aspiration hazard Not available.       Not available.         Potential acute health effects       : Not available.         Eye contact       : Causes eye irritation. Inhalation         Skin contact       : May cause an allergic skin reaction. Ingestion         Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering			2B	
Reproductive toxicity         Conclusion/Summary       :         Mixture.Not fully tested.         Teratogenicity         Conclusion/Summary       :         Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.         Specific target organ toxicity (repeated exposure) Not available.         Aspiration hazard Not available.         Potential acute health effects         Eye contact       :         Inhalation       :         Inhalation       :         May cause an allergic skin reaction. Ingestion         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         And the intervence of the physical in the intervence of the ph				
Conclusion/Summary       :       Mixture.Not fully tested.         Teratogenicity       Conclusion/Summary       :       Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.       Specific target organ toxicity (repeated exposure) Not available.         Specific target organ toxicity (repeated exposure) Not available.       Specific target organ toxicity (repeated exposure) Not available.         Aspiration hazard Not available.       :       Not available.         Potential acute health effects       :       Not available.         Potential acute health effects       :       Not known significant effects or critical hazards.         Skin contact       :       May cause an allergic skin reaction.         Inpestion       :       May cause an allergic skin reaction.         Ingestion       :       May cause an allergic skin reaction.         Stin contact       :       May cause an allergic skin reaction.         Ingestion       :       May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics       Eye contact         Eye contact       :       Adverse symptoms may include the following: irritation watering	Thainum dioxide		20	
Teratogenicity       image: mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.       image: mixture.Not fully tested.         Specific target organ toxicity (repeated exposure) Not available.       image: mixture.Not fully tested.         Aspiration hazard Not available.       image: mixture.Not fully tested.         Aspiration hazard Not available.       image: mixture.Not available.         Potential acute health effects       image: mixture.Not available.         Eye contact       :       Not available.         Inhalation       :       No known significant effects or critical hazards.         Skin contact       :       May cause an allergic skin reaction.         Ingestion       :       May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics       Eye contact         Eye contact       :       Adverse symptoms may include the following: irritation watering	<u>Reproductive toxicity</u>			
Conclusion/Summary       : Mixture.Not fully tested.         Specific target organ toxicity (single exposure) Not available.       Specific target organ toxicity (repeated exposure) Not available.         Aspiration hazard Not available.       Not available.         Potential acute health effects       : Not available.         Eye contact       : Causes eye irritation. Inhalation         in ontact       : No known significant effects or critical hazards. Skin contact         Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering	Conclusion/Summary	:	Mixture.Not fu	lly tested.
Specific target organ toxicity (single exposure) Not available.         Specific target organ toxicity (repeated exposure) Not available.         Aspiration hazard Not available.         Information on the likely routes of exposure         Potential acute health effects         Eye contact       :         Inhalation       :         Skin contact       :         May cause an allergic skin reaction.         Ingestion       :         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         Adverse symptoms may include the following: irritation watering	<u>Teratogenicity</u>			
Not available.         Specific target organ toxicity (repeated exposure) Not available.         Aspiration hazard Not available.         Information on the likely routes of exposure         Potential acute health effects         Eye contact       :         Inhalation       :         Skin contact       :         Ingestion       :         May cause an allergic skin reaction.         Ingestion       :         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       :         And the symptoms may include the following: irritation watering	Conclusion/Summary	:	Mixture.Not fu	lly tested.
Not available.         Aspiration hazard         Not available.         Information on the likely routes of exposure       : Not available.         Potential acute health effects         Eye contact       : Causes eye irritation.         Inhalation       : No known significant effects or critical hazards.         Skin contact       : May cause an allergic skin reaction.         Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering		(single expo	<u>sure)</u>	
Not available.Information on the likely routes of exposureNot available.Potential acute health effectsEye contact: Causes eye irritation.Inhalation: No known significant effects or critical hazards.Skin contact: May cause an allergic skin reaction.Ingestion: May be irritating to mouth, throat and stomach.Symptoms related to the physical, chemical and toxicological characteristicsEye contact: Adverse symptoms may include the following: irritation watering		(repeated ex	<u>kposure)</u>	
exposure         Potential acute health effects         Eye contact       : Causes eye irritation.         Inhalation       : No known significant effects or critical hazards.         Skin contact       : May cause an allergic skin reaction.         Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering				
Eye contact:Causes eye irritation.Inhalation:No known significant effects or critical hazards.Skin contact:May cause an allergic skin reaction.Ingestion:May be irritating to mouth, throat and stomach.Symptoms related to the physical, chemical and toxicological characteristicsEye contact:Adverse symptoms may include the following: irritation watering	-	es of :	Not available.	
Inhalation:No known significant effects or critical hazards.Skin contact:May cause an allergic skin reaction.Ingestion:May be irritating to mouth, throat and stomach.Symptoms related to the physical, chemical and toxicological characteristicsEye contact:Adverse symptoms may include the following: irritation watering	Potential acute health effects			
Inhalation:No known significant effects or critical hazards.Skin contact:May cause an allergic skin reaction.Ingestion:May be irritating to mouth, throat and stomach.Symptoms related to the physical, chemical and toxicological characteristicsEye contact:Adverse symptoms may include the following: irritation watering	Eve contact		Causes eve irrit	tation
Skin contact       : May cause an allergic skin reaction.         Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering				
Ingestion       : May be irritating to mouth, throat and stomach.         Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering				
Symptoms related to the physical, chemical and toxicological characteristics         Eye contact       : Adverse symptoms may include the following: irritation watering				
Eye contact : Adverse symptoms may include the following: irritation watering	6			<i>o i i i i i i i i i i</i>
irritation watering	Symptoms related to the physical	ical, chemic	al and toxicolog	gical characteristics
	Eye contact		irritation	oms may include the following:
			-	8



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		redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following:
Skin contact	•	irritation
		redness
Incostion		
Ingestion	:	No specific data.
Delayed and immediate effects and a	مادم ر	chronic effects from short and long term exposure
Delayed and minediate effects and a	<u>1150 (</u>	in one creets non 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	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Constructoriaiter		
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**

Product/ingredient name	Result	Species	Exposure
Antimony trioxide			
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	Acute LC50 > 530 mg/l Fresh	Fish - Fish	96 h
	water		
	Acute LC50 > 1,000,000 µg/l Marine water	Fish - Fish	96 h
	Acute EC50 423,450 µg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 560 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute EC50 730 µg/l Fresh water	Aquatic plants - Algae	72 h
	Acute EC50 760 µg/l Fresh water	Aquatic plants - Algae	96 h
	Acute EC50 740 µg/l Fresh water	Aquatic plants - Algae	96 h
	Acute No-observable-effect- concentration 200 µg/l Fresh water	Aquatic plants - Algae	4 d
Fitanium dioxide		-	·
	Acute LC50 > 1,000,000 µg/l Marine water	Fish - Fish	96 h
	Acute LC50 > 1,000 mg/l Fresh water	Fish - Fish	96 h
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 35.306 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h

#### Conclusion/Summary

#### Persistence and degradability

Conclusion/Summary

Not available. :



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#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
1,2-Benzenedicarboxylic	8.8	3.00	low
acid, di-C8-10-branched			
alkyl esters, C9-rich			
Bisphenol A -	2.64 - 3.78	31.00	low
Epichlorohydrin polymer			
Titanium dioxide		352.00	low

#### Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC) 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. 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

PolyOne.

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IMO/IMDG (maritime)

: Consult mode specific transport rules

## Section 15. Regulatory information

U.S. Federal regulations :	<b>United States - TSCA 12(b) - Chemical export notification:</b> 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
	Diisodecyl phthalate
	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
	<b>United States - TSCA 5(a)2 - Proposed significant new use rules:</b> 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: Listed
	Lead
	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 Lead oxide sulfate (Pb4O3(SO4))
	Antimony trioxide Diisodecyl phthalate
	Arsenic
	Lead
	Vinyl chloride monomer
	United States - EPA Clean water act (CWA) section 311 -
	Hazardous substances: Listed
	United States - EPA Clean air act (CAA) section 112 - Accidental
	release prevention - Flammable substances: Not listed
	United States - EPA Clean air act (CAA) section 112 - Accidental
	release prevention - Toxic substances: Not listed



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**United States - Department of commerce - Precursor chemical:** Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Listed
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 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
1,2-Benzenedicarboxylic acid, di- C8-10-branched alkyl esters, C9- rich	30 - 60	AH
Lead oxide sulfate (Pb4O3(SO4))	1 - 5	СН
Antimony trioxide	1 - 5	АН, СН
Bisphenol A - Epichlorohydrin polymer	0.1 - 1	АН
Titanium dioxide	0.1 - 1	СН

#### SARA 313

	Product name	CAS number	%	
Form R - Reporting	Lead oxide sulfate	12202-17-4	1 - 5	
requirements	(Pb4O3(SO4))			
	Antimony trioxide	1309-64-4	1 - 5	
Supplier notification	Lead oxide sulfate (Pb4O3(SO4))	12202-17-4	1 - 5	
	Antimony trioxide	1309-64-4	1 - 5	

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SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations		
Massachusetts	:	The following components are listed: Antimony trioxide
New York	:	The following components are listed: Antimony trioxide
New Jersey	:	The following components are listed: Ethene, chloro-, homopolymer Lead oxide sulfate (Pb4O3(SO4)) Antimony trioxide Titanium dioxide
Pennsylvania	:	The following components are listed: Lead oxide sulfate (Pb4O3(SO4)) Antimony trioxide
		Titanium dioxide

<u>California Prop. 65</u> WARNING: This product contains a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
International lists	:	<ul> <li>Australia inventory (AICS): Not determined.</li> <li>Taiwan inventory (CSNN): All components are listed or exempted.</li> <li>Malaysia Inventory (EHS Register): Not determined.</li> <li>EINECS: All components are listed or exempted.</li> <li>Japan inventory: Not determined.</li> <li>China inventory (IECSC): Not determined.</li> <li>Korea inventory: Not determined.</li> <li>New Zealand Inventory of Chemicals (NZIoC): Not determined.</li> <li>Philippines inventory (PICCS): Not determined.</li> </ul>
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed

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<b>Chemical Weapons Convention</b>	:	Not listed
List Schedule II Chemicals Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

## Section 16. Other information

<u>History</u>		
Date of printing	:	10/30/2015
Date of issue/Date of revision	:	10/29/2015
Date of previous issue	:	02/26/2015
Version	:	1.2
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 = Internediate 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.

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