MATERIAL SAFETY DATA SHEET **GEON 50-0218**

Version Number 1.0 Revision Date 10/05/2009 Page 1 of 8 Print Date 1/9/2012

1. PRODUCT AND COMPANY IDENTIFICATION POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012 Product Stewardship (440) 930-1395 Telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure **Emergency telephone** : or accident). Product name GEON 50-0218 : VC10006486 Product code : Chemical Name Mixture : CAS-No. Mixture : Product Use : Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Di(2-ethylhexyl)phthalate	117-81-7	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. 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. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	Routes of Exposure: : Inhalation, Ingestion, Skin contact		
Acute exposure			
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.		
Ingestion	: May be harmful if swallowed.		
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.		
Skin	: Experience shows no unusual dermatitis hazard from routine handling.		
Chronic exposure	: Refer to Section 11 for Toxicological Information.		
Medical Conditions Aggravated by Exposure:	: None known.		



MATERIAL SAFETY DATA SHEET **GEON 50-0218**

Version Number 1.0 Revision Date 10/05/2009 Page 2 of 8 Print Date 1/9/2012

		4. FIRST AID MEASURES
Inhalation	:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases of doubt seek medical advice.
Ingestion	:	Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.
Eyes	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.
Skin	:	Wash off with soap and plenty of water. If skin irritation persists seek medical attention.
		5. FIRE-FIGHTING MEASURES
Flash point	:	not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	:	not applicable not applicable Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	6. A	CCIDENTAL RELEASE MEASURES
Personal precautions	:	Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	:	Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.
Methods for cleaning up	:	Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume



MATERIAL SAFETY DATA SHEET **GEON 50-0218**

ion Number 1.0 sion Date 10/05/2009		Page 3 Print Date 1/9/2
		condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of
		these materials.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing
Additional Protective Measures	:	Safety shoes
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.
Exposure limit(s)		

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MATERIAL SAFETY DATA SHEET GEON 50-0218

Version Number 1.0 Revision Date 10/05/2009 Page 4 of 8 Print Date 1/9/2012

Components	Value	Exposure time	Exposure type	List:
Di(2- ethylhexyl)phthalate	5 mg/m3	Time Weighted Average (TWA):		ACGIH
	5 mg/m3	Recommended exposure limit (REL):		NIOSH
	10 mg/m3	Short Term Exposure Limit (STEL):		NIOSH
	5 mg/m3	PEL:		OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	10 mg/m3	Short Term Exposure Limit (STEL):		OSHA Z1A
	5 mg/m3	Time Weighted Average (TWA):		MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):		MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range **Boiling Point:** Water solubility

: solid pellets, powder TRANSPARENT very faint Not determined not applicable insoluble

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:

:

:

:

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pН

Not applicable : Not determined : Not established : not applicable : not applicable : not applicable :

10. STABILITY AND REACTIVITY

Stability	:	Stable
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

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.

MATERIAL SAFETY DATA SHEET **GEON 50-0218**

Version Number 1.0 Revision Date 10/05/2009 Page 5 of 8 Print Date 1/9/2012

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
117-81-7	Di(2-ethylhexyl)phthalate	Systemic effects	Eyes, Respiratory system,
			Liver, central nervous system
			(CNS), Skin, digestive system.

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
117-81-7	Di(2-ethylhexyl)phthalate	Oral	30 gm/kg25,000	ratrat
		LD50Oral	mg/kg	rabbit
		LD50	25 gm/kg	rabbit
		Dermal LD50	25,000 mg/kg	
		Dermal LD50		

Carcinogenicity

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This product contains the following components which, in their pure form, have the following carcinogenicity data:

	CAS-No.	Chemical Name	OSHA	IARC	NTP
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IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

Additional Health Hazard Information:

Di(2-ethylhexyl)phthalate 117-81-7 There is sufficient evidence for the carcinogenicity of di (2ethylhexyl) phthalate in experimental animals. Administered in the feed this chemical caused an increase incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain.

12. ECOLOGICAL INFORMATION

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Adverse ecological impact is not known or expected under normal use.
Bioaccumulation Potential	:	no data available
Additional advice	:	not applicable



MATERIAL SAFETY DATA SHEET **GEON 50-0218**

Version Number 1.0 Revision Date 10/05/2009 Page 6 of 8 Print Date 1/9/2012

	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
Contaminated packaging	: Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG (maritime)	: Not regulated for transportation.
	15. REGULATORY INFORMATION
US Regulations:	
OSHA Status	: Classified as hazardous based on components.
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Di(2-	117-81-7	100 lbs	400 LB
ethylhexyl)phthalat			
e			

California Proposition 65

: WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SARA Title III Section 302 Extremely Hazardous Substance

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MATERIAL SAFETY DATA SHEET **GEON 50-0218**

ersion Number 1.0 evision Date 10/05/2009		Page 7 of Print Date <i>1/9/</i> 201				
Unless specific chemicals are	identified unc	ler this section, thi	s product is Not	t Applicable	under this re	gulatio
SARA Title III Section 313 T	oxic Chemica	ls:				
Unless specific chemicals are	identified und	ler this section, thi	s product is Not	t Applicable	under this re	gulatio
Chemical Name		CAS-No.	Weight	percent		
DI(2-ETHYLHEXYL)PHT		117-81-7	10.00 -	30.00		
Canadian Regulations:						
National Pollutant Rel	ease Inventory	· · · ·	1			
Chemical Name		CAS-N		eight	NPRI ID#	
Di(2-ethylhexyl)phthalate		117-81		cent 00 - 30.00		
Zinc stearate		557-05		0 - 1.00		
WHMIS Classification WHMIS Ingredient Di CAS-No.						
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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The

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MATERIAL SAFETY DATA SHEET **GEON 50-0218**

Version Number 1.0 Revision Date 10/05/2009 Page 8 of 8 Print Date 1/9/2012

information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.