MATERIAL SAFETY DATA SHEET GEON 85885 BROWN

Version Number 1.0 Revision Date 01/15/2007

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	GEON 85885 BROWN
Product code	:	VC10004666
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Manganese antimony titanium brown rutile	68412-38-4	1 - 5
(C.I. Pigment Yellow 164)		
Dibutyltin dilaurate	77-58-7	1 - 5

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:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. 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.

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	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 o 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 see 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, foamnone. 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) unde fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	6. ACCIDENTAL 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 1 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE

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only in areas with appropriate exhaust ventilation. Processing condensates may contain combustible or toxic residue. Perio celean hoods, ducts, and other surfaces to minimize accumulat these materials.Storage:Keep containers dry and tightly closed to avoid moisture abso and contamination. Keep in a dry, cool place. 8. EXPOSURE CONTROLS / PERSONAL PROTECTION Respiratory protection:No personal respiratory protective equipment normally requir dusty conditions occur wear appropriate respiratory protectionEye/Face Protection:Safety glasses with side-shields.Hand protection:Safety shoes.Skin and body protection:Safety shoes.General Hygiene Considerations:Handle in accordance with good industrial hygiene and safety Wash hands before breaks and at the end of workday. This p may contain residual vinyl chloride monomer (VCM) (CAS r 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under nor working conditions with adequate ventilation, hocal exha ventilation, air-monitoring, respiratory protection, etc.) to ens airborne levels of any vapors including VCM or dusts that may released during heating or processing are below regulated lev Engineering measures:Heat only in areas with appropriate exhaust ventilation. Prov	on Number 1.0 on Date 01/15/2007		Page 3 of Print Date 11/26/201
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Respiratory protection: No personal respiratory protective equipment normally requir dusty conditions occur wear appropriate respiratory protectionEye/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 Wash hands before breaks and at the end of workday. This p may contain residual vinyl chloride monomer (VCM) (CAS r 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under nor working conditions with adequate ventilation, that the exposu will be exceeded for residual VCM. However, the user should necessary precautions (e.g. mechanical ventilation, local exha ventilation, air-monitoring, respiratory protection, etc.) to ens airborne levels of any vapors including VCM or dusts that may released during heating or processing are below regulated levEngineering measures: Heat only in areas with appropriate exhaust ventilation. Prov	torage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
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ConsiderationsWash hands before breaks and at the end of workday. This p may contain residual vinyl chloride monomer (VCM) (CAS r 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under nor working conditions with adequate ventilation, that the exposu will be exceeded for residual VCM. However, the user should necessary precautions (e.g. mechanical ventilation, local exha ventilation, air-monitoring, respiratory protection, etc.) to ens airborne levels of any vapors including VCM or dusts that ma released during heating or processing are below regulated levEngineering measures:		:	Safety shoes.
		:	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.
appropriate exhaust ventilation at machinery.	ngineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.
Exposure limit(s)			

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Components	Value	Exposure time	Exposure type	List:
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	5 mg/m3	Ceiling Limit Value:	Dust. as Mn	OSHA Z1
	0.5 mg/m3	PEL:	Dust. as Sb	OSHA Z1
	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	ACGIH
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.2 mg/m3	Time Weighted Average (TWA):	as Mn	MX OEL
Dibutyltin dilaurate	0.1 mg/m3	PEL:	as Sn	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	as Sn	ACGIH
	0.2 mg/m3	Short Term Exposure Limit (STEL):	as Sn	ACGIH

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Appearance
Color
Odor
Melting point/range
Boiling Point:
Water solubility

Solid
Pellets, powder
BROWN
Very faint
Not determined
Not applicable
Insoluble

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH 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

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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.

Toxicity Overview

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

CAS-No.	Chemical Name	Effect	Target Organ
68412-38-4	Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	Irritant	Eyes, Skin.
77-58-7	Dibutyltin dilaurate	toxic	Refer to LC50 / LD50 Data on MSDS
		Systemic effects	Eyes, Skin, Liver, central nervous system (CNS), heart or circulatory 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
77-58-7	Dibutyltin dilaurate	Oral LD50Oral LD50	175 mg/kg175 mg/kg	ratrat

Persistence and degradability	: Not readily biodegradable.		
Environmental Toxicity : Adverse ecological impact is not known or expected under normal			
Bioaccumulation Potential	: No data available		
Additional advice	: Not applicable		
	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 materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.		
	14. TRANSPORT INFORMATION		

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				int Date 7 //20/20
U.S. DOT Classification	. Not as sulots d f			
U.S. DOT Classification	: Not regulated for	or transportation.		
ICAO/IATA (air)	: Not regulated for	or transportation.		
IMO / IMDG (maritime)	: Not regulated for	or transportation.		
	15. REGULATOR	RY INFORMATI	ION	
US Regulations:				
OSHA Status	: Classified as ha	zardous based on	components.	
TSCA Status	: All component Inventory.	s of this product a	re listed on or exer	npt from the TSCA
US. EPA CERCLA Hazardou	is Substances (40 CFR	302)		
Not applicable				
California Proposition 65	i : Not applicable			
SARA Title III Section 302 E	Extremely Hazardous Su	ibstance		
	-			
Unless specific chemicals are	identified under this se	ection, this produc	t is Not Applicabl	e under this regulat
SARA Title III Section 313 T	ovic Chamicals			
SARA THE III SECUOI 515 I	oxic Chemicals.			
Unless specific chemicals are	identified under this se		<u> </u>	
Chemical Name MANGANESE COMPOU	NDSANTIMONY	CAS-1 68412-		- 5.00
COMPOUNDS		00112	1.00	5.00
Canadian Regulations:				
	ease Inventory (NPRI)			
Chemical Name		CAS-No.	Weight %	NPRI ID#
Manganese antimony titani Pigment Yellow 164)	um brown rutile (C.I.	68412-38-4	1.00 - 5.00	147
			1.00 - 5.00	17
Phthalocyanine blue		147-14-8	0.10 - 1.00	71
Phthalocyanine green		1328-53-6	0.10 - 1.00	71

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WHMIS Classification	:	D1B	
WHMIS Ingredient Disclosure List			
CAS-No. 68412-38-4 77-58-7			
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	
National Inventories:			
Australia AICS	:	Not determined	
China IECS	:	Not determined	
Europe EINECS	:	Listed	
Japan ENCS	:	Not determined	
Korea KECI	:	Not determined	
Philippines PICCS	:	Not determined	
		16. OTHER INFORMATION	

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 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.