PolvOne.

MATERIAL SAFETY DATA SHEET **GEON 8461 GRAY 2398**

Version Number 1.2 Revision Date 03/29/2014

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	GEON 8461 GRAY 2398
Product code	:	VC10006002
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Titanium dioxide	13463-67-7	0.1 - 1
Calcium carbonate	1317-65-3	1 - 5
Calcium stearate	1592-23-0	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	: 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.

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Medical Conditions Aggravated by Exposure:	: None known.	
	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 doubt seek medical advice.	0
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 least 15 minutes. If eye irritation persists, seek medical attention.	at
Skin	: Wash off with soap and plenty of water. If skin irritation persists seek medical attention.	
	5. FIREFIGHTING MEASURES	
Flash point	: not applicable	
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition 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 positiv pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) und fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), 	
	oxides of nitrogen (NOx), other hazardous materials, and smoke ar all possible.	e
	. 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 r be allowed to enter drains, water courses or the soil.	ot
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material i plastic, cardboard or metal containers for disposal.	n

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only in areas with appropriate exhaust ventilation. Processing funct 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. EXPOSURE 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 : Safety shoes Measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Th 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 VM. 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.			7. HANDLING AND STORAGE
and contamination. Keep in a dry, cool place. 8. EXPOSURE 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 : Safety shoes General Hygiene : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Th 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, 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	Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
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 : Safety shoes Measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Th 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	Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
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Skin and body protection: Long sleeved clothingAdditional Protective Measures: Safety shoesGeneral Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Th 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	Eye/Face Protection	:	Safety glasses with side-shields
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	Engineering measures	:	
Exposure limit(s)	Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
1				
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average		MX OEL
	-	(TWA):		
	20 mg/m3	Short Term Exposure Limit		MX OEL
		(STEL):		
Calcium stearate	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average	Total dust.	OSHA Z1A
		(TWA):		
	10 mg/m3	Time Weighted Average	as Ti	MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- solid
 pellets, powder
 GREY
 very faint
 Not determined
 not applicable
 insoluble

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicable
Not determined
Not established
not applicable
not applicable
not applicable

10. STABILITY AND REACTIVITY

Stability	:	The product is stable if stored and handled as prescribed.
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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory
			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
1592-23-0	Calcium stearate	Oral LD50	> 10 gm/kg	rat

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	no	2B	no

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.

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	
	13. DISPOSAL CONSIDERATIONS	T
Product	Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The	

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	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 Hazardo	bus Substances (40 CFR 302)
not applicable	
California Propositio 65	n : Not applicable
SARA Title III Section 302	Extremely Hazardous Substance
Unless specific chemicals are	e identified under this section, this product is Not Applicable under this regulat
SARA Title III Section 313	Toxic Chemicals:
	Toxic Chemicals: e identified under this section, this product is Not Applicable under this regulat

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not applicable		
WHMIS Classification	:	D2A
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	:	Not determined
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.