## MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

Version Number 1.0 Revision Date 08/18/2009

Page 1 of 7 Print Date 1/8/2012

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	GEON FC990 BLACK 2999
Product code	:	VC10006407
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	0.1 - 1
Calcium carbonate	1317-65-3	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

<b>Routes of Exposure:</b>	: 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.

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# MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

Version Number 1.0 Revision Date 08/18/2009 Page 2 of 7 Print Date 1/8/2012

Aggravated by Exposure:	
	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 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	<ul> <li>not applicable</li> <li>not applicable</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> </ul>
Unusual Fire/Explosion Hazards	: May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides 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 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE

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# MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

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	osorption
E CONTROLS/PERSONAL PROTECTION	
Safety glasses with side-shields	
Protective gloves	
Long sleeved clothing	
Safety shoes	
practice. Wash hands before breaks and at the end of work product may contain residual vinyl chloride monomer (VCL number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respir protection, etc.) to ensure airborne levels of any vapors inclu VCM or dusts that may be released during heating or proce	day. This M) (CAS , under he ver, the l atory luding
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: <b>UR</b> : : :	<ul> <li>clean hoods, ducts, and other surfaces to minimize accumult these materials.</li> <li>Keep containers dry and tightly closed to avoid moisture at and contamination. Keep in a dry, cool place.</li> <li>URE CONTROLS/PERSONAL PROTECTION</li> <li>No personal respiratory protective equipment normally requered dusty conditions occur wear appropriate respiratory protect</li> <li>Safety glasses with side-shields</li> <li>Protective gloves</li> <li>Long sleeved clothing</li> <li>Safety shoes</li> <li>Handle in accordance with good industrial hygiene and safe practice. Wash hands before breaks and at the end of work product may contain residual vinyl chloride monomer (VCI number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. Howev user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respir protection, etc.) to ensure airborne levels of any vapors incl VCM or dusts that may be released during heating or proce below regulated levels.</li> </ul>

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## MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

Version Number 1.0 Revision Date 08/18/2009 Page 4 of 7 Print Date 1/8/2012

Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 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
  BLACK
  very faint
  Not determined
  not applicable
  insoluble

Evaporation 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
: Stable
: Will not occur.
: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
: Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
: 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.

### MATERIAL SAFETY DATA SHEET GEON FC990 BLACK 2999

#### Version Number 1.0 Revision Date 08/18/2009

Page 5 of 7 Print Date 1/8/2012

#### 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.

#### Toxicity Overview

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

CAS-No.	Chemical Name	Effect	Target Organ
1333-86-4	Carbon black	Systemic effects	Eyes, 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
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1333-86-4	Carbon black	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.

#### Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

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# MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

Version Number 1.0 Revision Date 08/18/2009 Page 6 of 7 Print Date 1/8/2012

	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
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)
not applicable	
California Proposition	: WARNING! This product contains a chemical known to the State of

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## MATERIAL SAFETY DATA SHEET **GEON FC990 BLACK 2999**

Version Number 1.0PageRevision Date 08/18/2009Print Date 1/8					
65		California to cause cancer.			
SARA Title III Section 302 Ext	rem	ely Hazardous Substance			
Unless specific chemicals are id	enti	fied under this section, this product is Not Applicable under this regulation			
SARA Title III Section 313 Tox	tic (	Chemicals:			
Unless specific chemicals are id	enti	fied under this section, this product is Not Applicable under this regulation			
Canadian Regulations:					
National Pollutant Relea	National Pollutant Release Inventory (NPRI)				
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	:	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.