PolyOne

# MATERIAL SAFETY DATA SHEET **GEON 87600 BLUE**

Version Number 1.3 Revision Date 05/16/2008

Page 1 of 8 Print Date 1/3/2012

### 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 87600 BLUE
Product code	:	VC10004655
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Cobalt aluminate blue spinel (C.I. Pigment	1345-16-0	0.1 - 1
Blue 28)		
Chromium (III) oxide	1308-38-9	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Calcium carbonate	471-34-1	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.

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# MATERIAL SAFETY DATA SHEET **GEON 87600 BLUE**

Version Number 1.3 Revision Date 05/16/2008 Page 2 of 8 Print Date 1/3/2012

Medical Conditions       : None known.         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 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 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	: Not applicable		
Lower explosion limit	: Not applicable		
Autoignition temperature	: Not applicable		
Suitable extinguishing media	: Carbon dioxide blanket, Water spray, Dry powder, Foam.		
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.		
Unusual Fire/Explosion Hazards	<ul> <li>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 are all possible.</li> </ul>		
	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 Sectior 13 of this MSDS for proper disposal methods.		

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# MATERIAL SAFETY DATA SHEET **GEON 87600 BLUE**

Version Number 1.3 Revision Date 05/16/2008 Page 3 of 8 Print Date 1/3/2012

Handling	: Take measures to prevent the build up of electrostatic charge. Here only in areas with appropriate exhaust ventilation. Processing fun condensates may contain combustible or toxic residue. Periodical clean hoods, ducts, and other surfaces to minimize accumulation of these materials.	ne ly
Storage	: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.	m
8. EX	POSURE CONTROLS/PERSONAL PROTECTION	
Respiratory protection	: No personal respiratory protective equipment normally required. dusty conditions occur wear appropriate respiratory protection.	If
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. T product may contain residual vinyl chloride monomer (VCM) (CA 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 a below regulated levels.	\S
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 87600 BLUE**

Version Number 1.3 Revision Date 05/16/2008 Page 4 of 8 Print Date 1/3/2012

Components	Value	Exposure time	Exposure type	List:
Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	0.02 mg/m3	Time Weighted Average (TWA):	as Co	ACGIH
Calcium carbonate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	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
Chromium (III) oxide	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Stability

: Solid : pellets, powder : BLUE Very faint : Not determined Not applicable : Insoluble

: Stable.

:

:

- 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**

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

## MATERIAL SAFETY DATA SHEET GEON 87600 BLUE

Version Number 1.3 Revision Date 05/16/2008

Page 5 of 8 Print Date 1/3/2012

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.

### **Toxicity Overview**

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

CAS-No.	Chemical Name	Effect	Target Organ
1345-16-0	Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	Irritant	Eyes, Skin, Respiratory system.
		sensitizer	Skin.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
471-34-1	Calcium carbonate	Irritant	Eyes, Skin.

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
471-34-1	Calcium carbonate	Oral LD50	6,450 mg/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
1345-16-0	Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	no	2B	no
13463-67-7	Titanium dioxide	<b>n</b> 0	2B	<b>n</b> 0
15405-07-7	i italiulii dioxide	no	2 <b>D</b>	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:

Chromium (III) oxide 1308-38-9 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

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# MATERIAL SAFETY DATA SHEET **GEON 87600 BLUE**

Version Number 1.3 Revision Date 05/16/2008 Page 6 of 8 Print Date 1/3/2012

	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 (air)	: 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	

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### MATERIAL SAFETY DATA SHEET GEON 87600 BLUE

Version Number 1.3 Revision Date 05/16/2008 Page 7 of 8 Print Date 1/3/2012

California Proposition : Not applicable 65

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight %
COBALT COMPOUNDSCOBALT COMPOUNDS,	1345-16-0	0.10 - 1.00
INORGANICCOBALT COMPOUNDS, ORGANIC		

Canadian Regulations:

	National Pollutant Release Inventory (NPRI)	
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Chemical Name	CAS-No.	Weight %	NPRI ID#
Cobalt aluminate blue spinel (C.I. Pigment Blue	1345-16-0	0.10 - 1.00	
28)			
Chromium (III) oxide	1308-38-9	0.10 - 1.00	
Phthalocyanine blue	147-14-8	0.10 - 1.00	

WHMIS Classification : D2A

DSL

: All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	:	Listed

- China IECS : Listed
- Europe EINECS : Listed
- Japan ENCS : Not determined
- Korea KECI : Listed

Philippines PICCS : Listed

### **16. OTHER INFORMATION**

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### MATERIAL SAFETY DATA SHEET GEON 87600 BLUE

Version Number 1.3 Revision Date 05/16/2008 Page 8 of 8 Print Date 1/3/2012

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.