

### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

 Version Number 1.0
 Page 1 of 7

 Revision Date 10/17/2003
 Print Date 11/12/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY : Product Stewardship (770) 271-5902

TELEPHONE

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

number or accident).

Product name : GRAY 424C
Product code : CC10044550
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Cobalt aluminate blue spinel (C.I. Pigment	1345-16-0	0.1 - 1
Blue 28)		
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	30 - 60

# 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

## 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 : Particulates, like other inert materials can be mechanically irritating.
Skin : Experience shows no unusual dermatitis hazard from routine handling.

**Chronic exposure** : Refer to Section 11 for Toxicological Information.



### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

 Version Number 1.0
 Page 2 of 7

 Revision Date 10/17/2003
 Print Date 11/12/2011

**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 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 : Not applicable Lower explosion limit : Not applicable Autoignition temperature : Not relevant

Suitable extinguishing media : Carbon dioxide blanket, water spray, dry powder, foam.

Special Fire Fighting

Procedures

 $: \quad Full face \ self-contained \ breathing \ apparatus \ (SCBA) \ used \ in \ positive$ 

pressure mode should be worn to prevent inhalation of airborne

contaminants.

Unusual Fire/Explosion

Hazards

None

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 scoop 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



#### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

 Version Number 1.0
 Page 3 of 7

 Revision Date 10/17/2003
 Print Date 11/12/2011

only in areas with appropriate exhaust ventilation.

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

Hand protection : Protective gloves.

Skin and body protection : Long sleeved clothing.

Additional Protective

Measures

Safety shoes.

General Hygiene

Considerations

Wash hands and face before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety

practice for diagnostics.

Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide

appropriate exhaust ventilation at machinery.

### Exposure limit(s)

Components	Value	Exposure time Exposure type		List:	
Cobalt aluminate blue	0.10	PEL:	Total dust. as Co	OSHA Z1	
spinel (C.I. Pigment	mg/m3				
Blue 28)					
	0.02	Time Weighted Average	as Co	ACGIH	
	mg/m3	(TWA):			
Carbon black	3.5 mg/m3	Time Weighted Average	Total dust. as carbon	ACGIH	
		(TWA):	black		
	3.5 mg/m3	PEL:	Total dust. as carbon	OSHA Z1	
			black		
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH	
		(TWA):			
	15 mg/m3	PEL:	Total dust.	OSHA Z1	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid Evaporation rate Not applicable Not determined Appearance : flakes Specific Gravity Color **GREY** Bulk density Not determined Vapor pressure Odor Very faint Not determined Melting point/range : Greater than 130 °C Vapour density : Not determined



### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

Version Number 1.0 Page 4 of 7
Revision Date 10/17/2003 Print Date 11/12/2011

Boiling Point: : Not applicable pH : Not applicable

Water solubility : Insoluble

## 10. STABILITY AND REACTIVITY

Stability : Stable.

Hazardous Polymerization : Will not occur.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible Materials : Incompatible with strong acids and oxidizing agents.

Hazardous decomposition

products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

(NOx), dense black smoke.

## 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	Irritant	Eyes, Skin, Respiratory system.
	spinel (C.I. Pigment Blue		
	28)		
		sensitizer	Skin.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	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
1345-16-0	Cobalt aluminate blue spinel	no	2B	no
	(C.I. Pigment Blue 28)			

### IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.



### MATERIAL SAFETY DATA SHEET

## **GRAY 424C**

Version Number 1.0 Page 5 of 7
Revision Date 10/17/2003 Print Date 11/12/2011

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.

### 12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the matrix

of the polymer.

Bioaccumulation Potential : Not inherently biodegradable.

Additional advice : Chemicals are not readily available as they are bound within the matrix

of the polymer.

### 13. DISPOSAL CONSIDERATIONS

Product : 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 : Refer to specific regulation.

ICAO/IATA (air) : Refer to specific regulation.



#### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

 Version Number 1.0
 Page 6 of 7

 Revision Date 10/17/2003
 Print Date 11/12/2011

IMO / IMDG (maritime) : Refer to specific regulation.

### 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 : This product does not contain a substance listed by California Prop 65.

65

SARA Title III Section 302 Extremely Hazardous Substance

Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
COBALT COMPOUNDS	1345-16-0	0.44

# Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	1345-16-0	0.44	69

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No. 1333-86-4

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

National Inventories:



#### MATERIAL SAFETY DATA SHEET

# **GRAY 424C**

Version Number 1.0 Page 7 of 7
Revision Date 10/17/2003 Print Date 11/12/2011

Australia AICS : Listed

China IECS : Listed

Europe EINECS : Not determined

Japan ENCS : Not determined

Korea KECI : Not determined

Philippines PICCS : Listed

## 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 when used in combination with any other materials and/or in any particular process or processing conditions.