

#### MATERIAL SAFETY DATA SHEET

## PEARL GOLD/BLUE FLIP

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

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

number or accident).

Product name : PEARL GOLD/BLUE FLIP

Product code : CC10070646 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

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

Components	CAS-No.	Weight %
1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products	70624-18-9	1 - 5
C.I. Pigment Red 108	58339-34-7	1 - 5
Barium sulfate	7727-43-7	5 - 10
Cadmium	7440-43-9	5 - 10
Mica	12001-26-2	10 - 30
Titanium dioxide	13463-67-7	10 - 30

#### 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 : Resin particles, like other inert materials, are mechanically irritating to



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eyes.

Skin : Experience shows no unusual dermatitis hazard from routine handling.

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

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 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

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



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of this MSDS for proper disposal methods.

7. HANDLING AND STORAGE

Handling : Take measures to prevent the build up of electrostatic charge. Heat

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.

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.

Engineering 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:
Barium sulfate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
C.I. Pigment Red 108	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
_	mg/m3	(TWA):	Cd	
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3	(TWA):		
	0.005	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:		OSHA
	mg/m3			
	0.01	Time Weighted Average	Total dust. as Cd	MX OEL
	mg/m3	(TWA):		
	0.002	Time Weighted Average	Respirable dust. as Cd	MX OEL
	mg/m3	(TWA):		
	0.2 mg/m3	Time Weighted Average (TWA):	as Se	ACGIH
	0.2 mg/m3	PEL:	as Se	OSHA Z1
	0.2 mg/m3	Time Weighted Average (TWA):	as Se	MX OEL
Cadmium	0.01	Time Weighted Average	Inhalable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	
	0.005	Time Weighted Average	Total as Cd	OSHA
	mg/m3	(TWA):		
	0.002	Time Weighted Average	Respirable fraction. as	ACGIH
	mg/m3	(TWA):	Cd	
	0.01	Time Weighted Average	as Cd	ACGIH
	mg/m3	(TWA):		
	0.2 mg/m3	Time Weighted Average (TWA):		OSHA Z2
	0.1 mg/m3	Time Weighted Average (TWA):		OSHA Z2
	0.6 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.3 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.002	Time Weighted Average	Respirable dust. as Cd	MX OEL
	mg/m3	(TWA):		
	0.01	Time Weighted Average	Total dust. as Cd	MX OEL
	mg/m3	(TWA):		
Mica	20 mppcf	PEL:	Total dust.	OSHA
	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	3 mg/m3	Time Weighted Average (TWA):		MX OEL
	10 / 0	` /		ACGIH
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACOM



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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

Evaporation rate : Not applicable Form : Solid Specific Gravity : Not determined : pellets Appearance Color : ORANGE : Not established Bulk density : Very faint : Not applicable Odour Vapour pressure Melting point/range : Not determined Vapour density : Not applicable Boiling Point: : Not applicable : Not applicable pН

Water solubility : Insoluble

#### 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.

Hazardous decomposition

products

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

(NOx), other hazardous materials, and smoke are all possible.

#### 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
70624-18-9	1,6-Hexanediamine, N,N'-bis(2,2,6,6-tetrameth yl-4-piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5-triazi ne, reaction products	Irritant	Eyes, Skin, Respiratory system.
58339-34-7	C.I. Pigment Red 108	Irritant	Eyes, Skin.
		Systemic effects	Liver, central nervous system (CNS), Kidney.
7727-43-7	Barium sulfate	Irritant	Respiratory system.
		Systemic effects	Eyes, Respiratory system.



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7440-43-9	Cadmium	Systemic effects	Respiratory system, blood and blood forming system, Kidney, urinary system, reproductive system.
		Highly Toxic	Refer to LC50 / LD50 Data on MSDS
12001-26-2	Mica	Systemic effects	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
70624-18-9	1,6-Hexanediamine,	Oral LD50	> 2,000 mg/kg	rat
	N,N'-bis(2,2,6,6-tetrameth	Dermal LD50	> 3,000 mg/kg	rat
	yl-4-piperidinyl)-,polymer			
	with			
	2,4,6-trichloro-1,3,5-triazi			
	ne, reaction products			
7440-43-9	Cadmium	LC50	25 mg/m3	rat
		Oral LD50	2,330 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
58339-34-7	C.I. Pigment Red 108	yes	1	no
7440-43-9	Cadmium	yes	1	1
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.

#### **Additional Health Hazard Information:**

C.I. Pigment Red 108 58339-34-7 Can produce rapid and sometimes fatal pulmonary edema. Chronic absorption leads to liver and kidney damage.

#### **Additional Health Hazard Information:**

Cadmium 7440-43-9 Can produce rapid and sometimes fatal pulmonary edema. Chronic absorption leads to liver and kidney damage.

## 12. ECOLOGICAL INFORMATION



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Persistence and degradability : Not readily biodegradable.

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

polymer matrix.

Bioaccumulation Potential : Chemicals are not readily available as they are bound within the

polymer matrix.

Additional advice : No data available

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) : Refer to specific regulation.

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)

Chemical Name	CAS-No.	RQ for component	RQ for Mixture/Product
Cadmium	7440-43-9	010 lbs	161 LB



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California Proposition

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WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or

other reproductive harm.

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 %
CADMIUM COMPOUNDSSELENIUM COMPOUNDS	58339-34-7	1.00 - 5.00
CADMIUM	7440-43-9	5.00 - 10.00

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
C.I. Pigment Red 108	58339-34-7	1.00 - 5.00	233
		1.00 - 5.00	200
Cadmium	7440-43-9	5.00 - 10.00	233
Zinc sulfide	1314-98-3	0.10 - 1.00	231

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
58339-34-7
7440-43-9
12001-26-2

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



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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.