PolvOne

## MATERIAL SAFETY DATA SHEET BLACK PEARL PP

Version Number 1.1 Revision Date 06/12/2008

Page 1 of 8 Print Date 1/4/2012

### 1. PRODUCT AND COMPANY IDENTIFICATION

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

Telephone Emergency telephone	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	BLACK PEARL PP
Product code	:	CC10112235
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	5 - 10
Carbon black	1333-86-4	1 - 5
Iron oxide	1309-37-1	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Rutile (TiO2)	1317-80-2	5 - 10
Mica	12001-26-2	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.

PolyOne.

# MATERIAL SAFETY DATA SHEET **BLACK PEARL PP**

ion Number 1.1 sion Date 06/12/2008	Page 2 Print Date 1/4/2
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.
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 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	: 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>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



# MATERIAL SAFETY DATA SHEET **BLACK PEARL PP**

sion Number 1.1 ision Date 06/12/2008		Page Print Date 1/4/		
		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 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. EX	POSU	RE 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)				

<u>PolyOne</u>

## MATERIAL SAFETY DATA SHEET **BLACK PEARL PP**

Version Number 1.1 Revision Date 06/12/2008 Page 4 of 8 Print Date 1/4/2012

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Iron oxide	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
Mica	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	3 mg/m3	Time Weighted Average (TWA):		MX OEL
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

pellets
BLACK
Very faint
Not determined
Not applicable
Insoluble

: Solid

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density рН

: Not applicable Not determined : : Not established : Not applicable : Not applicable : Not applicable

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

## MATERIAL SAFETY DATA SHEET BLACK PEARL PP

#### Version Number 1.1 Revision Date 06/12/2008

Page 5 of 8 Print Date 1/4/2012

products

(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'-	Irritant	Eyes, Skin, Respiratory
	bis(2,2,6,6-tetramethyl-4-		system.
	piperidinyl)-,polymer with		
	2,4,6-trichloro-1,3,5-		
	triazine, reaction products		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
12001-26-2	Mica	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, N,N'-	Oral LD50	> 2,000 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4- piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5- triazine, reaction products	Dermal LD50	> 3,000 mg/kg	rat
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
13463-67-7	Titanium dioxide	no	2B	no
1317-80-2	Rutile (TiO2)	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.

PolyOne

## MATERIAL SAFETY DATA SHEET BLACK PEARL PP

Version Number 1.1 Revision Date 06/12/2008

Page 6 of 8 Print Date 1/4/2012

### 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**

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:	

PolyOne.

# MATERIAL SAFETY DATA SHEET **BLACK PEARL PP**

/ersion Number 1.1 Revision Date 06/12/2008				F	Page Print Date 1/4	7 of 8
Cevision Date 00/12/2000						/2012
OSHA Status :	Classified as hazardous b	based on co	mponent	s.		
TSCA Status :	All components of this product are listed on or exempt from the TSCA Inventory.					
US. EPA CERCLA Hazardous Sub	stances (40 CFR 302)					
Not applicable						
California Proposition : 65	Not applicable					
SARA Title III Section 302 Extrem	ely Hazardous Substance					
Unless specific chemicals are identi	ified under this section thi	s product is	Not An	nlicable	under this requ	ulation
Unless specific chemicals are identi	incu under uns section, un	s product is	Not Ap	pricable	under uns regt	ulation
SARA Title III Section 313 Toxic C						
Unless specific chemicals are identi	ified under this section, thi					ulation
Chemical Name ZINC COMPOUNDS		CAS-No. 68187-51-		Weight 1.00 - 1		
Zhite comi ocrubs		00107 51	,	1.00	5.00	
Canadian Regulations:						
National Dallatant Dalaasa I						
National Pollutant Release In Chemical Name	CAS-N	Io	Weight	%	NPRI ID#	
Copper	7440-5		0.10 - 1.00			
Zinc	7440-6	6-6	0.10 - 1	00.1		
WHMIS Classification : WHMIS Ingredient Disclosu CAS-No. 1333-86-4 1309-37-1 12001-26-2 DSL :	D2A are List All components of this p	product are	on the C	anadian	Domestic	
	Substances List (DSL) of					

PolyOne

## MATERIAL SAFETY DATA SHEET BLACK PEARL PP

Version Number 1.1 Revision Date 06/12/2008 Page 8 of 8 Print Date 1/4/2012

National Inventories:

Australia AICS	:	Listed
China IECS	:	Listed
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.