MATERIAL SAFETY DATA SHEET **PANORAMIC SILVER PEARL**

Version Number 1.1 Revision Date 05/24/2007 Page 1 of 6 Print Date 11/28/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1
Mica	12001-26-2	1 - 5

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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to
Skin	eyes. : 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.

PolyOne.

MATERIAL SAFETY DATA SHEET **PANORAMIC SILVER PEARL**

Version Number 1.1 Revision Date 05/24/2007 Page 2 of 6 Print Date 11/28/2011

		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. A	CCIDENTAL 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
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

PolyOne.

MATERIAL SAFETY DATA SHEET PANORAMIC SILVER PEARL

Version Number 1.1 Revision Date 05/24/2007 Page 3 of 6 Print Date 11/28/2011

8. H	EXPOSURE	CONTROLS / PER	SONAL	PROTECTION	N	
Respiratory protection	: N	lo personal respirator	y protecti	ve equipment no	ormally 1	required.
Eye/Face Protection	: S	afety glasses with sic	le-shields			
Hand protection	: P	rotective gloves				
Skin and body protection	: L	ong sleeved clothing				
Additional Protective Measures	: S	afety shoes				
General Hygiene Considerations		andle in accordance Vash hands before br				afety practice
Engineering measures		leat only in areas wit ppropriate exhaust ve			tilation.	Provide
Exposure limit(s)						
Components	Value	Exposure tin	ne	Exposure	type	List:
Mica	3 mg/m3	3 mg/m3 Time Weighted Average (TWA):		Respirable fraction.		ACGIH
	3 mg/m3					MX OEL
Titanium dioxide	10 mg/m3	Image: Time Weighted Average (TWA):				ACGIH
	15 mg/m3 PEL:		Total du	st.	OSHA ZI	
	10 mg/m3	Time Weighted A (TWA):	verage	as Ti		MX OEL
	20 mg/m3	Short Term Exposu (STEL):	re Limit	as Ti		MX OEL
	9. PHYSI	CAL AND CHEMIC	CAL PRO	PERTIES		
Form	: Solid	1	Evanor	ration rate	: Not	applicable
Appearance	: pelle			c Gravity		determined
Color	: GRE		Bulk d			established
Odour	: Very	faint		r pressure		applicable
Melting point/range	•	determined		r density	: Not	applicable
Boiling Point:		applicable	pH		: Not	applicable
Water solubility	: Insol	uble				
	10. 5	STABILITY AND R	EACTIV	TTY		
Stability	: S	table.				

MATERIAL SAFETY DATA SHEET PANORAMIC SILVER PEARL

Version Number 1.1 Revision Date 05/24/2007 Page 4 of 6 Print Date 11/28/2011

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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
12001-26-2	Mica	Systemic effects	Respiratory system.

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

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.

12. ECOLOGICAL INFORMATION

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

PolyOne.

MATERIAL SAFETY DATA SHEET **PANORAMIC SILVER PEARL**

Version Number 1.1 Revision Date 05/24/2007 Page 5 of 6 Print Date 11/28/2011

	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 Hazardou	us Substances (40 CFR 302)
Not applicable	
California Proposition 65	n : Not applicable
SARA Title III Section 302 E	Extremely Hazardous Substance
Unless specific chemicals are	identified under this section, this product is Not Applicable under this regulat
SARA Title III Section 313 1	Sourie Chamicela

MATERIAL SAFETY DATA SHEET **PANORAMIC SILVER PEARL**

Version Number 1.1 Revision Date 05/24/2007 Page 6 of 6 Print Date 11/28/2011

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name CAS-No. Weight % NPRI ID# 7429-90-5 0.10 - 1.00 Aluminum 12 WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 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 : Japan ENCS Not determined : Korea KECI Listed : **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 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.