MATERIAL SAFETY DATA SHEET PEARL BLUE UV

Version Number 1.1 Revision Date 03/13/2014

Page 1 of 8 Print Date 3/20/2014

1. PRODUCT AND COMPANY IDENTIFICATION POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012				
Product name	:	PEARL BLUE UV		
Product code	:	CC10128822		
Chemical Name	:	Mixture		
CAS-No.	:	Mixture		
Product Use	:	Industrial Applications		

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
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
Titanium dioxide	13463-67-7	0.1 - 1
Carbon black	1333-86-4	1 - 5
Mica	12001-26-2	5 - 10
Rutile (TiO2)	1317-80-2	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.

PolyOne.

MATERIAL SAFETY DATA SHEET **PEARL BLUE UV**

sion Date 03/13/2014	Page 2 Print Date 3/20/2
Ingestion Eyes	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.
	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. FIREFIGHTING MEASURES
Flash point	: not applicable
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	 not applicable not applicable not applicable 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
Unusual Fire/Explosion Hazards	 contaminants. 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.



MATERIAL SAFETY DATA SHEET PEARL BLUE UV

sion Date 03/13/2014		Page 3 Print Date 3/20/2
Methods for cleaning up		up promptly by sweeping or vacuum. Package all material in , cardboard or metal containers for disposal.
	7. HAI	NDLING AND STORAGE
Handling		neasures to prevent the build up of electrostatic charge. Heat a areas with appropriate exhaust ventilation.
Storage		containers dry and tightly closed to avoid moisture absorption ontamination. Keep in a dry, cool place.
8. EXI	SURE CO	NTROLS/PERSONAL PROTECTION
Respiratory protection	: No per	rsonal respiratory protective equipment normally required.
Eye/Face Protection	: Safety	glasses with side-shields
Hand protection	: Protec	tive gloves
Skin and body protection	: Long	sleeved clothing
Additional Protective Measures	: Safety	shoes
General Hygiene Considerations		e in accordance with good industrial hygiene and safety ce. Wash hands before breaks and at the end of workday.
Engineering measures	: Heat o approj	only in areas with appropriate exhaust ventilation. Provide priate exhaust ventilation at machinery.
Exposure limit(s)		
Exposure limit(s)		

PolyOne.

MATERIAL SAFETY DATA SHEET PEARL BLUE UV

Version Number 1.1 Revision Date 03/13/2014 Page 4 of 8 Print Date 3/20/2014

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Mica	3 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	3 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	3 mg/m3	Time Weighted Average (TWA):		MX OEL
Rutile (TiO2)	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	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):	Total dust.	OSHA Z1A
	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 Colour Odour Melting point/range Boiling Point: : solid
: pellets
: BLUE
: very faint
: Not determined
: not applicable

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicable
Not determined
Not established
not applicable
not applicable
not applicable

P<u>olyOne</u>

MATERIAL SAFETY DATA SHEET PEARL BLUE UV

Version Number 1.1 Revision Date 03/13/2014 Page 5 of 8 Print Date 3/20/2014

Water solubility	: insoluble
	10. STABILITY AND REACTIVITY
Stability	: The product is stable if stored and handled as prescribed.
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.

<u>Toxicity Overview</u> 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		
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1333-86-4	Carbon black	Systemic effects	Eyes, 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:

PolvOne

MATERIAL SAFETY DATA SHEET PEARL BLUE UV

Version Number 1.1 Revision Date 03/13/2014 Page 6 of 8 Print Date 3/20/2014

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.

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 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.

PolyOne

MATERIAL SAFETY DATA SHEET **PEARL BLUE UV**

Version Number 1.1 Revision Date 03/13/2014 Page 7 of 8 Print Date 3/20/2014

U.S. DOT Classification	:	Not regulated	for transportation.		
ICAO/IATA	•	Refer to speci	-		
	•	Kelel to speci	ne regulation.		
IMO/IMDG (maritime)	:	Refer to speci	fic regulation.		
	15	5. REGULATC	ORY INFORMAT	ION	
US Regulations:					
OSHA Status	:	Classified as l	nazardous based or	or components.	
TSCA Status	:	All component TSCA Invento	nts of this product ory.	are listed on or exe	empt from the
US. EPA CERCLA Hazardo	us Sub	stances (40 CFI	R 302)		
not applicable					
California Propositio 65	n :	WARNING! California to c	This product conta cause cancer.	iins a chemical kno	own to the State of
SARA Title III Section 302	Extrem	ely Hazardous	Substance		
Unless specific chemicals are		-		et is Not Applicabl	le under this regul:
		~1 · 1			
SARA Title III Section 313	l'oxic (Themicals:			
Unless specific chemicals are	e ident	ified under this	section, this produ-	et is Not Applicabl	le under this regula
Canadian Regulations:					
National Pollutant Re	lease I	nventory (NPR))		
Chemical Name	ieuse i		CAS-No.	Weight percent	NPRI ID#
Phthalocyanine blue			147-14-8	1.00 - 5.00	
			1328-53-6	5.00 - 10.00	
Phthalocyanine green					

PolyOne

MATERIAL SAFETY DATA SHEET **PEARL BLUE UV**

Version Number 1.1 Revision Date 03/13/2014

_

Page 8 of 8 Print Date 3/20/2014

	WHMIS Ingredient Discl	osu	re List
	CAS-No. 1333-86-4 12001-26-2 147-14-8 1328-53-6		
	DSL	:	All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations.
Natior	nal Inventories:		
	Australia AICS	:	Not determined
	China IECS	:	Not determined
	Europe EINECS	:	Not determined
	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.