PolyOne

MATERIAL SAFETY DATA SHEET RED PEARL

Version Number 1.1 Revision Date 10/26/2006

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	RED PEARL
Product code	:	CC10040391
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

: Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl	57583-35-4	1 - 5
ester		
Mica	12001-26-2	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Dioctyltin bis(2-ethylhexylmercaptoacetate)	15571-58-1	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	: Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.
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.

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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 Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	:::::::::::::::::::::::::::::::::::::::	Not applicable Not applicable Not applicable Carbon dioxide blanket, water spray, dry powder, foamnone. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.		
	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		



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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. EXI	POSUI	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)		

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Value	Exposure tim	e	Exposure type	List:
0.1 mg/m3	PEL:		as Sn	OSHA Z1
0.1 mg/m3	Time Weighted A (TWA):	verage	as Sn	ACGIH
0.2 mg/m3	Short Term Exposur (STEL):	re Limit	as Sn	ACGIH
20 mppcf	PEL:		Total dust.	OSHA
3 mg/m3	(TWA):	-	Respirable fraction	. ACGIH
3 mg/m3	Time Weighted A (TWA):	verage		MX OEL
10 mg/m3	(TWA):			ACGIH
15 mg/m3			Total dust.	OSHA Z1
20 mg/m3	Short Term Exposur (STEL):	re Limit	as Ti	MX OEL
0.1 mg/m3			as Sn	OSHA Z1
0.1 mg/m3	Time Weighted A (TWA):	verage	as Sn	ACGIH
0.2 mg/m3	Short Term Exposur (STEL):	re Limit	as Sn	ACGIH
9. PHYSIC	CAL AND CHEMIC	CAL PRO	PERTIES	
: Pelle : RED : Very : Not c	ts faint letermined	Specific Bulk de Vapor Vapour	c Gravity: : N ensity : N pressure : N density : N	fot applicable fot determined fot established fot applicable fot applicable fot applicable
	0.1 mg/m3 0.1 mg/m3 0.2 mg/m3 0.2 mg/m3 3 mg/m3 3 mg/m3 10 mg/m3 10 mg/m3 0.1 mg/m3 0.1 mg/m3 0.2 mg/m3 0.1 mg/m3 0.2 mg/m3 0.1 mg/m3 0.2 mg/m3 0.1 mg/m3 0.2 mg/m3 0.1 mg/m3 0.2 mg	0.1 mg/m3 PEL: 0.1 mg/m3 Time Weighted Average (TWA): 0.2 mg/m3 Short Term Exposuse (STEL): 20 mppcf PEL: 3 mg/m3 Time Weighted Average (TWA): 3 mg/m3 Time Weighted Average (TWA): 3 mg/m3 Time Weighted Average (TWA): 10 mg/m3 Time Weighted Average (TWA): 10 mg/m3 Time Weighted Average (TWA): 10 mg/m3 Time Weighted Average (TWA): 0.1 mg/m3 Short Term Exposuse (STEL): 0.1 mg/m3 Time Weighted Average (TWA): 0.1 mg/m3 Short Term Exposuse (STEL): 0.1 mg/m3 Time Weighted Average (TWA): 0.2 mg/m3 Short Term Exposuse (STEL): 9. PHYSICAL AND CHEMIC : Solid : Pellets : RED : Very faint : Not determined	0.1 mg/m3 PEL: 0.1 mg/m3 Time Weighted Average (TWA): 0.2 mg/m3 Short Term Exposure Limit (STEL): 20 mppcf PEL: 3 mg/m3 Time Weighted Average (TWA): 3 mg/m3 Time Weighted Average (TWA): 3 mg/m3 Time Weighted Average (TWA): 10 mg/m3 Time Weighted Average (TWA): 10 mg/m3 Time Weighted Average (TWA): 10 mg/m3 PEL: 20 mg/m3 Short Term Exposure Limit (STEL): 0.1 mg/m3 PEL: 0.1 mg/m3 Time Weighted Average (TWA): 0.1 mg/m3 Short Term Exposure Limit (STEL): 0.1 mg/m3 Short Term Exposure Limit (STEL): 0.2 mg/m3 Short Term Exposure Limit (STEL): 0.2 mg/m3 Short Term Exposure Limit (STEL): 9. PHYSICAL AND CHEMICAL PRO : Solid Evapor (STEL): 9. PHYSICAL AND CHEMICAL PRO : Solid Evapor (STEL): : Not determined Vapour (Stell)	0.1 mg/m3 PEL: as Sn 0.1 mg/m3 Time Weighted Average (TWA): as Sn 0.2 mg/m3 Short Term Exposure Limit (STEL): as Sn 20 mppcf PEL: Total dust. 3 mg/m3 Time Weighted Average (TWA): Respirable fraction (TWA): 3 mg/m3 Time Weighted Average (TWA): Respirable fraction (TWA): 10 mg/m3 Time Weighted Average (TWA): Total dust. 20 mg/m3 Short Term Exposure Limit (STEL): as Sn 0.1 mg/m3 PEL: Total dust. 0.1 mg/m3 PEL: as Sn 0.1 mg/m3 Time Weighted Average (TWA): as Sn 0.1 mg/m3 PEL: as Sn 0.1 mg/m3 Time Weighted Average (TWA): as Sn 0.2 mg/m3 Short Term Exposure Limit (STEL): as Sn 0.2 mg/m3 Short Term Exposure Limit (STEL): as Sn 9. PHYSICAL AND CHEMICAL PROPERTIES : Not determined Napor pressure : N : Not determined Vapour density : N : N

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	:	Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during



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	processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.
Hazardous decomposition products	 Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon

11. TOXICOLOGICAL INFORMATION

monoxide and hydrogen chloride.

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
57583-35-4	8-Oxa-3,5-dithia-4-stannat etradecanoic acid, 10-ethyl-4,4-dimethyl-7-o xo-, 2-ethylhexyl ester	Irritant	Eyes, Skin.
12001-26-2	Mica	Systemic effects	Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
15571-58-1	Dioctyltin bis(2-ethylhexylmercaptoa cetate)	Systemic effects	Respiratory system, central nervous system (CNS).

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
15571-58-1	Dioctyltin bis(2-ethylhexylmercaptoa cetate)	Oral LD50	2,100 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
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.

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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
	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 materia 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)
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Not applicable

California Proposition : Not applicable 65

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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Not applicable

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
57583-35-4	
12001-26-2	
15571-58-1	

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National 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

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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.