MATERIAL SAFETY DATA SHEET **PDS 13187-02 EXPL7330 Black**

Version Number 1.5 Revision Date 04/23/2013

Product Use

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	PDS 13187-02 EXPL7330 Black
Product code	:	VC10004872
Chemical Name	:	Mixture
CAS-No.	:	Mixture

: Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
8-Oxa-3,5-dithia-4-stannatetradecanoic acid,	57583-35-4	1 - 5
10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl		
ester		
Stannane, methyltris(2-	57583-34-3	1 - 5
ethylhexyloxycarbonylmethylthio)-		
Styrene	100-42-5	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Manganese antimony titanium brown rutile	68412-38-4	1 - 5
(C.I. Pigment Yellow 164)		
Calcium stearate	1592-23-0	1 - 5
Carbon black	1333-86-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. The end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:

: Inhalation, Ingestion, Skin contact

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

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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.	
		7. HANDLING AND STORAGE	
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.	
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. If dusty conditions occur wear appropriate respiratory protection.	
Eye/Face Protection	:	Safety glasses with side-shields	
Hand protection	:	Protective gloves	
Skin and body protection	:	Long sleeved clothing	
Additional Protective Measures	:	Safety shoes	
		Handle in accordance with good industrial hygiene and safety	
General Hygiene Considerations	:	practice. Wash hands before breaks and at the end of workday. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.	

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Exposure limit(s)

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Components	Value	Exposure time	Exposure type	List:
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	1 mg/m3	Recommended exposure limit (REL):	Fume. as Mn	NIOSH
	3 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Mn	NIOSH
	5 mg/m3	Ceiling Limit Value:	as Mn	OSHA Z1
	5 mg/m3	Ceiling Limit Value:	as Mn	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Calcium stearate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
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
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Styrene	20 ppm	Time Weighted Average (TWA):		ACGIH
	40 ppm	Short Term Exposure Limit (STEL):		ACGIH

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	50 ppm	Recommended exposure		NIOSH
	215 mg/m3	limit (REL):		
	100 ppm	Short Term Exposure Limit		NIOSH
	425 mg/m3	(STEL):		
	100 ppm	Time Weighted Average		OSHA Z2
		(TWA):		
	200 ppm	Ceiling Limit Value:		OSHA Z2
	600 ppm	Maximum concentration:		OSHA Z2
	50 ppm	Time Weighted Average		OSHA Z1A
	215 mg/m3	(TWA):		
	100 ppm	Short Term Exposure Limit		OSHA Z1A
	425 mg/m3	(STEL):		
	50 ppm	Time Weighted Average		MX OEL
	215 mg/m3	(TWA):		
	100 ppm	Short Term Exposure Limit		MX OEL
	425 mg/m3	(STEL):		
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	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	as Ti	MX OEL
	10 mg/m3	(TWA):	us 11	MIX OLL
	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: Water solubility

pellets, powder BLACK very faint Not determined not applicable : insoluble

: solid

:

:

:

:

:

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pН

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

not applicable :

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., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

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products

(NOx), 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 monoxide and hydrogen chloride.

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
57583-35-4	8-Oxa-3,5-dithia-4- stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7- oxo-, 2-ethylhexyl ester	Irritant	Eyes, Skin.
57583-34-3	Stannane, methyltris(2- ethylhexyloxycarbonylmet hylthio)-	Irritant	Eyes, Skin.
100-42-5	Styrene	Irritant	Eyes, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, Liver, central nervous system (CNS).
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
68412-38-4	Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	Irritant	Eyes, Skin.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, 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
57583-34-3	Stannane, methyltris(2- ethylhexyloxycarbonylmet hylthio)-	Oral LD50	920 mg/kg	rat
100-42-5	Styrene	LC50	12 gm/m3	rat
		Oral LD50	2,650 mg/kg	rat
1592-23-0	Calcium stearate	Oral LD50	> 10 gm/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:

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CAS-No.	Chemical Name	OSHA	IARC	NTP
100-42-5	Styrene	no	2B	no
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:

Styrene 100-42-5 Irritating to eyes, skin, and respiratory tract with many CNS effects such as narcosis, cramps and respiratory tract paralysis.

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

Additional advice	: not applicable
Bioaccumulation Potential	: no data available
Environmental Toxicity	: Adverse ecological impact is not known or expected under normal use.
Persistence and degradability	: Not readily biodegradable.

: 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.

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Contaminated packaging	material has the resp		
	14. TRANSPORT IN	FORMATION	
U.S. DOT Classification	: Not regulated for tra	insportation.	
ICAO/IATA	: Not regulated for tra	insportation.	
IMO/IMDG (maritime)	: Not regulated for tra	insportation.	
	15. REGULATORY I	NFORMATION	
US Regulations:			
OSHA Status	: Classified as hazard	ous based on compor	nents.
TSCA Status	: All components of TSCA Inventory.	this product are listed	on or exempt from the
US. EPA CERCLA Hazardo	us Substances (40 CFR 302)	1	
not applicable			
California Propositio 65	n : Not applicable		
SARA Title III Section 302	Extremely Hazardous Substa	nce	
Unless specific chemicals are	e identified under this sectio	n, this product is Not	Applicable under this regul
SARA Title III Section 313	Foxic Chemicals:		
Unless specific chemicals are	e identified under this section	· · · · · · · · · · · · · · · · · · ·	
Chemical Name MANGANESE COMPOL	INDSMANGANESE	CAS-No. 68412-38-4	Weight percent 1.00 - 5.00
COMPOUNDSANTIMO			
CHROMIUM III COMPO COMPOUNDSANTIMO		68186-90-3	0.10 - 1.00
COMPOUNDSCHROMI			
OTVDENEGTVDENE		100-42-5	0.10 - 1.00
STYRENESTYRENE			

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Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Manganese antimony titanium brown rutile (C.I.	68412-38-4	1.00 - 5.00	
Pigment Yellow 164)			
		1.00 - 5.00	
Rutile, antimony chromium buff	68186-90-3	0.10 - 1.00	
Styrene	100-42-5	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
68412-38-4
1333-86-4
68186-90-3
57583-34-3
100-42-5

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 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.