MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 1 of 8 Print Date 4/13/2013

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	:	MSDS X155-061-050-02 (1104 WHITE)
Product code	:	VC10003345
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Lead Stearate	7428-48-0	0.1 - 1
Lead oxide sulfate (Pb4O3(SO4))	12202-17-4	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Antimony trioxide	1309-64-4	5 - 10
Calcium carbonate	1317-65-3	5 - 10

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
Acute exposure	
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 eyes.

PolyOne.

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 2 of 8 Print Date *4/13/2013*

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. FIREFIGHTING MEASURES
Flash point	: not applicable
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition 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, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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.
	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 MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 3 of 8 Print Date *4/13/2013*

		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
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety 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.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.
Exposure limit(s)		

PolyOne

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 4 of 8 Print Date 4/13/2013

Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	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
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Lead oxide sulfate	0.05	Time Weighted Average	as Pb	ACGIH
(Pb4O3(SO4))	mg/m3	(TWA):		
	0.05	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.03 mg/m3	OSHA Action level:		OSHA
	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	OSHA Z1A
	0.15 mg/m3	Time Weighted Average (TWA):	Dust and fume. as Pb	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: Water solubility
- solid
 pellets, powder
 WHITE
 very faint
 Not determined
 not applicable
 insoluble
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- 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.

PolyOne

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 5 of 8 Print Date *4/13/2013*

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 products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (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
7428-48-0	Lead Stearate	Systemic effects	central nervous system (CNS), reproductive system.
12202-17-4	Lead oxide sulfate (Pb4O3(SO4))	Systemic effects	reproductive system, central nervous system (CNS).
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	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
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 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
12202-17-4	Lead oxide sulfate (Pb4O3(SO4))	yes	2A	no
13463-67-7	Titanium dioxide	no	2B	no

PolyOne

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 6 of 8 Print Date *4/13/2013*

	ony trioxide	no	2B	no
IARC Carcinogen Classificatio 1 - The component is carcinoge 2A - The component is probabl 2B - The component is possibly NTP Carcinogen Classification 1 - The component is known to	enic to humans. y carcinogenic to hum y carcinogenic to huma s: be a human carcinoge	ns.		
2 - The component is reasonabl				
Additional Health Hazard Inf Lead Stearate 7428-48-0 Sy with abdominal pain, anemia Additional Health Hazard Inf Lead oxide sulfate (Pb4O3(SO	vstemic effects include , pallor, decreased ha <u>formation:</u>	nd grip strength wit	h characteristic '	'wrist drop''.
and reproductive with abdom				
"wrist drop".				
Additional Health Hazard Int				
Antimony trioxide 1309-64- include redness and burning				
include: antimony measles (a		n uamage. Auution	ar symptoms or s	Kin contact in
	12. ECOLOGICA	L INFORMATION		
Persistence and degradability	: Not readily biod	egradable.		
	: Adverse ecologi	cal impact is not know	wn or expected un	der normal
Environmental Toxicity	use.	-		
Environmental Toxicity Bioaccumulation Potential	•	-		
Bioaccumulation Potential	use. : no data available	2		
	use.	- ;		
Bioaccumulation Potential	use. no data available not applicable 	DNSIDERATIONS		
Bioaccumulation Potential	use. : no data available : not applicable 13. DISPOSAL CO : Like most therm possible recyclin generator of was classification, tra		osal or incineration sponsibility for pro- osal in accordance	n. The oper waste with
Bioaccumulation Potential Additional advice	use. : no data available : not applicable 13. DISPOSAL CO : Like most therm possible recycling generator of was classification, tra applicable federa : Recycling is prei material has the transportation an	DNSIDERATIONS oplastic plastics the p og is preferred to disp te material has the rea ansportation and disp	osal or incineration sponsibility for pro- osal in accordance d local regulations The generator of per waste classific ince with applicable	n. The oper waste with waste ation,
Bioaccumulation Potential Additional advice Product	use. : no data available : not applicable 13. DISPOSAL CO : Like most therm possible recycling generator of was classification, tra applicable federa : Recycling is pre- material has the transportation an state/provincial a	DNSIDERATIONS oplastic plastics the p oplastic plastics the p oplastic plastics the re- ansportation and dispo- al, state/provincial and ferred when possible. responsibility for pro- od disposal in accorda	osal or incineration sponsibility for pro- osal in accordance d local regulations The generator of per waste classific ince with applicable	n. The oper waste with waste ation,

PolyOne

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013 Page 7 of 8 Print Date *4/13/2013*

U.S. DOT Classification	:	Not regulated fo	r transpo	rtation.			
ICAO/IATA	:	Not regulated fo	r transpo	rtation.			
IMO/IMDG (maritime)	:	Not regulated fo	r transpo	rtation.			
	15	. REGULATOR	Y INFO	RMATION	N		
US Regulations:							
OSHA Status	:	Classified as haz	zardous b	ased on coi	nponent	s.	
TSCA Status	:	: All components of this product are listed on or exempt from the TSCA Inventory.					
US. EPA CERCLA Hazardo	us Sub	stances (40 CFR 3	302)				
not applicable							
65	7	California to cau chemical known other reproducti	to the St ve harm.				
SARA Title III Section 302 I							
Unless specific chemicals are	e identi	fied under this see	ction, this	s product is	Not Ap	plicable	under this regul
SARA Title III Section 313	ſoxic C	Chemicals:					
Unless specific chemicals are	e identi	fied under this see	ction, this	s product is CAS-No.	_	-	under this regul
	DS			1309-64-4		5.00 - 1	-
Chemical Name ANTIMONY COMPOUN			n	12202-17-		0.10 - 1	
	AD CO	MPOUNDSLEA	D				
ANTIMONY COMPOUN LEAD COMPOUNDSLEA	AD CO	MPOUNDSLEA		7428-48-0	1	0.10 - 1	1.00
ANTIMONY COMPOUN LEAD COMPOUNDSLEA COMPOUNDS, INORGA LEAD COMPOUNDS	AD CO	MPOUNDSLEA		7428-48-0	,	0.10 - 1	1.00
ANTIMONY COMPOUN LEAD COMPOUNDSLEA COMPOUNDS, INORGA LEAD COMPOUNDS Canadian Regulations: National Pollutant Ref	AD CO NIC						
ANTIMONY COMPOUN LEAD COMPOUNDSLEA COMPOUNDS, INORGA LEAD COMPOUNDS Canadian Regulations:	AD CO NIC		CAS-N		Weight		1.00 NPRI ID#

PolyOne

MATERIAL SAFETY DATA SHEET MSDS X155-061-050-02 (1104 WHITE)

Version Number 1.1 Revision Date 04/12/2013

Page 8 of 8 Print Date 4/13/2013

Bisphenol A		80-05-7	0.10 - 1.00	
Lead oxide sulfate (Pb4O3(SO4))		12202-17-4	0.10 - 1.00	
			0.10 - 1.00	
			0.10 - 1.00	
WHMIS Classification WHMIS Ingredient Discl				
W HIVIIG Highedicht Disch				
CAS-No.				
1309-64-4				
12202-17-4				
DSL	: All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.			
ational Inventories:				
Australia AICS	: Listed			
China IECS	: Listed			
Europe EINECS	: Listed			
Japan ENCS	: Not deterr	nined		
Korea KECI	: Listed			
Philippines PICCS	: Listed			

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.