## MATERIAL SAFETY DATA SHEET CX-6233-A L-9 BROWN PLASTISOL

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	CX-6233-A L-9 BROWN PLASTISOL
Product code	:	FO20003625
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Di(2-ethylhexyl)phthalate	117-81-7	0.1 - 1
Miscellaneous Nickel Compounds	Not Available	0.1 - 1
Carbon black	1333-86-4	1 - 5
Silica, amorphous, diatomaceous earth	68855-54-9	1 - 5
Silica, cristobalite	14464-46-1	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Miscellaneous Antimony compounds	Not Available	1 - 5
Nickel antimony yellow rutile (C.I. Pigment	8007-18-9	5 - 10
Yellow 53)		

#### **3. HAZARDS IDENTIFICATION**

#### EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.

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Eyes Skin	<ul> <li>May cause eye/skin irritation.</li> <li>Experience shows no unusual dermatitis hazard from routine handling.</li> </ul>	
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 or 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 for at least 15 minutes. If ey irritation persists, seek medical attention.	
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.	
	5. FIRE-FIGHTING MEASURES	
Flash point	: No data available	
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	<ul> <li>No data available</li> <li>No data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> </ul>	
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	<ul> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>	
	6. ACCIDENTAL RELEASE MEASURES	
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.	
Environmental precautions	: The product should not be allowed to enter drains, water courses or th soil. Should not be released into the environment.	

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Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
		7. HANDLING AND STORAGE
Handling	:	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. Store in a cool dry place.
8. EXI	POSUE	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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Components	Value	Exposure time	Exposure type	List:
Nickel antimony	1 mg/m3	PEL:	as Ni	OSHA Z1
yellow rutile (C.I. Pigment Yellow 53)				
rightent renow 55)	0.2 mg/m3	Time Weighted Average	Inhalable fraction. as	ACGIH
		(TWA):	Ni	
	0.5 mg/m3	Time Weighted Average	as Sb	ACGIH
		(TWA):		
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Carbon black	3.5 mg/m3	Time Weighted Average		ACGIH
	C	(TWA):		
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Di(2-ethylhexyl)phthal ate	5 mg/m3	Time Weighted Average (TWA):		ACGIH
	5 mg/m3	PEL:		OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):		MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Silica, amorphous, diatomaceous earth	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL
Silica, cristobalite	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.15 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.05 mg/m3	Time Weighted Average (TWA):		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):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL
Miscellaneous Nickel Compounds	0.2 mg/m3	Time Weighted Average (TWA):	as Ni	ACGIH
	1 mg/m3	PEL:	as Ni	OSHA Z1

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Miscellaneous Antimony compounds	0.5 mg/m3	Time Weighte (TWA		as Sb	ACGIH
Thinning compounds	0.5 mg/m3	PEL		as Sb	OSHA Z1
	0.5 mg/m3	Time Weighte (TWA	d Average	as Sb	MX OEL
	9 PHYSIC	CAL AND CHEN		RTIFS	
	<i>7</i> ,111,510				
Form	: liquio		Evaporati		lot established
Appearance		ous, liquid	Specific C		lot determined
Color	: BRO		Bulk dens		lot applicable
Odour	: Very		Vapour pi		lot determined
Melting point/range		pplicable	Vapour de		lot determined
Boiling Point:		pplicable	pН	: N	lot applicable
Water solubility	: Immi	scible			
	10. S	TABILITY AN	D REACTIVIT	Y	
Stability	: S1	able.			
Hazardous Polymerizatio	n : W	ill not occur.			
Conditions to avoid		eep away from o ecomposition, do		and open flame. To	o avoid thermal
Incompatible Materials		: Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.			
Hazardous decomposition products	(N sr de af	IOx), hydrogen c noke are all poss gradation. As a	hloride (HCl), o ible. Prolonged general rule of th 77 °C (350 °F), a	noxide (CO), oxide ther hazardous ma heating may result humb, degradation after 10 minutes at 0 °F).	terials, and in product begins to occur

#### **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
117-81-7	Di(2-ethylhexyl)phthalate	Systemic effects	Eyes, Respiratory system,
			Liver, central nervous system
			(CNS), Skin, digestive system.
Not Available	Miscellaneous Nickel	sensitizer	Skin.
	Compounds		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.

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68855-54-9	Silica, amorphous, diatomaceous earth	Irritant	Eyes, Skin, Respiratory system.
14464-46-1	Silica, cristobalite	Systemic effects	Respiratory system.
		Irritant	Eyes, Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
Not Available	Miscellaneous Antimony compounds	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	Irritant	Eyes, Skin.
		sensitizer	Skin.

#### 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
117-81-7	Di(2-ethylhexyl)phthalate	Oral LD50	30 gm/kg	rat
		Dermal LD50	25 gm/kg	rabbit
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
Not Available	Miscellaneous Antimony	Oral LD50	> 34,600 mg/kg	rat
	compounds			

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
Not Available	Miscellaneous Nickel	no	1	2
	Compounds			
14464-46-1	Silica, cristobalite	no	1	no
13463-67-7	Titanium dioxide	no	2B	no
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	no	1	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:

Di(2-ethylhexyl)phthalate 117-81-7 There is sufficient evidence for the carcinogenicity of di (2-ethylhexyl) phthalate in experimental animals. Administered in the feed this chemical caused an increase incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain.

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#### Additional Health Hazard Information:

Miscellaneous Nickel Compounds Not Available Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

#### 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.

#### Additional Health Hazard Information:

Silica, cristobalite 14464-46-1 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

#### Additional Health Hazard Information:

Miscellaneous Antimony compounds Not Available Can cause eye irritation. Can cause skin irritation Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

#### Additional Health Hazard Information:

Nickel antimony yellow rutile (C.I. Pigment Yellow 53) 8007-18-9 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: No data available
Additional advice	: No data available
	13. DISPOSAL CONSIDERATIONS
Product	: 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	:	has the responsibility for	or proper waste clas	e generator of waste material ssification, transportation e federal, state/provincial
	1	4. TRANSPORT INFO	RMATION	
U.S. DOT Classification	:	Refer to specific regulat	tion.	
ICAO/IATA (air)	:	Refer to specific regular		
IMO / IMDG (maritime)	:	Refer to specific regular		
	15	. REGULATORY INFO	ORMATION	
US Regulations:				
OSHA Status	:	Classified as hazardous	based on compone	ents.
TSCA Status	:	All components of this Inventory.	product are listed o	n or exempt from the TSCA
US. EPA CERCLA Hazardous	s Sub	stances (40 CFR 302)		
Not applicable				
California Proposition 65	:	WARNING! This prod California to cause canc		nical known to the State of
SARA Title III Section 302 Ex	trem	elv Hazardous Substance		
Unless specific chemicals are i				Applicable under this regulation
	aciiti			ippilouolo under uno regular
SARA Title III Section 313 To	oxic (	Chemicals:		
Unless specific chemicals are i	identi	fied under this section. th	his product is Not A	Applicable under this regulation
Chemical Name			CAS-No.	Weight %
NICKEL COMPOUNDSANTIMONY COMPOUNDS			8007-18-9	5.00 - 10.00
	NICKEL COMPOUNDS			
	CAN	TIMONY	Not Available	0.10 - 1.00 1.00 - 5.00

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National Pollutant Release Inventory (NPRI	[)		
Chemical Name	CAS-No.	Weight %	NPRI ID#
Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	8007-18-9	5.00 - 10.00	168
		5.00 - 10.00	17
Zinc	7440-66-6	0.10 - 1.00	231
Miscellaneous Nickel Compounds	Not Available	0.10 - 1.00	168
1,2,4-Trimethylbenzene	95-63-6	0.10 - 1.00	223
Miscellaneous Antimony compounds	Not Available	1.00 - 5.00	17

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
8007-18-9
1333-86-4
117-81-7
68855-54-9
14464-46-1
95-63-6
Not Available

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.

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

:

#### **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

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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.