MATERIAL SAFETY DATA SHEET 210V MINK **BASE PP FORMULA**

Version Number 1.0 Revision Date 09/26/2012

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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	:	210V MINK **BASE PP FORMULA**
Product code	:	CC10170104
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Decanedioic acid, bis(2,2,6,6-tetramethyl-4- piperidinyl) ester	52829-07-9	1 - 5
Carbon black	1333-86-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	68412-38-4	10 - 30
Iron oxide	1309-37-1	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.
Ingestion	: May be harmful if swallowed.

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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 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, 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 Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion	: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen
Hazards	(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.
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in

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		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	POSU	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.

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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
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
Iron oxide	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Respirable 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



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	0.5 mg/m3	Time Weighte	ed Average	as Sb	MX OEL
	C	(TWA			
	9. PHYSIC	CAL AND CHE	MICAL PROPE	RTIES	
Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility		WN faint letermined pplicable	Evaporatic Specific G Bulk densi Vapour pre Vapour de pH	ravity : N ty : N essure : no nsity : no	ot applicable ot determined ot established ot applicable ot applicable ot applicable
	10. S	TABILITY AN	D REACTIVITY	Y	
Stability Hazardous Polymerization		he product is stal 'ill not occur.	ble if stored and h	andled as prescrib	ed.
Conditions to avoid		eep away from o ecomposition, do		nd open flame. To	avoid thermal
Incompatible Materials	: In	compatible with	strong acids and	oxidizing agents.	
Hazardous decomposition products				oxide (CO), oxide: nd smoke are all p	

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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
52829-07-9	Decanedioic acid, bis(2,2,6,6-tetramethyl-4- piperidinyl) ester	Irritant	Eyes.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
68412-38-4	Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	Irritant	Eyes, Skin.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.

LC50 / LD50

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

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CAS-No.	Chemical Name	Route	Value	Species
52829-07-9	Decanedioic acid,	Oral LD50	3,700 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4- piperidinyl) ester	Dermal LD50	> 3,100 mg/kg	rabbit
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

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.
	14. TRANSPORT INFORMATION
U.S. DOT Classification	: Not regulated for transportation.

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	15. REGULATO	RY INFO	RMATIC	JIN		
JS Regulations:						
OSHA Status	Classified as h	and out h	acad an a		ta	
OSHA Status	: Classified as ha	izaruous t		omponen	115.	
TSCA Status	: All component TSCA Inventor		broduct are	e listed o	n or exen	npt from the
JS. EPA CERCLA Hazardous S	Substances (40 CFR	302)				
not applicable						
California Proposition 65	: Not applicable					
			s product	is Not Aj	pplicable	under this regula
Jnless specific chemicals are ide SARA Title III Section 313 Toxi	entified under this so ic Chemicals:	ection, this	-		-	-
Jnless specific chemicals are ide SARA Title III Section 313 Toxi Jnless specific chemicals are ide Chemical Name	entified under this se ic Chemicals: entified under this se	ection, this	s product CAS-No	is Not Aj 0.	pplicable Weight	under this regula
MANGANESE COMPOUND	entified under this so ic Chemicals: entified under this so SMANGANESE	ection, this	s product	is Not Aj 0.	pplicable	under this regula
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Jnless specific chemicals are ide SARA Title III Section 313 Toxi Jnless specific chemicals are ide Chemical Name MANGANESE COMPOUND COMPOUNDSANTIMONY COMPOUNDSANTIMONY COMPOUNDSANTIMONY COMPOUNDSCHROMIUM Canadian Regulations: National Pollutant Releas Chemical Name Manganese antimony titanium	entified under this so ic Chemicals: entified under this so SMANGANESE COMPOUNDS DSCHROMIUM II COMPOUNDS e Inventory (NPRI) brown rutile (C.I.	ection, this ection, this I CAS-N	s product CAS-No 68412-33 68186-90 10. 38-4	is Not Aj o. 8-4 0-3 Weigh percer 10.00	pplicable Weight 10.00 - 0.10 - 0.10 - 10 0.10 - 10 0.00 - 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	under this regula percent · 30.00 1.00

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WHMIS Classification	: D2A	
WHMIS Ingredient Discl	osure List	
CAS-No. 68412-38-4 1333-86-4 1309-37-1 68186-90-3		
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.