MATERIAL SAFETY DATA SHEET APOLLO GREY 966881 D1115UV

Version Number 1.1 Revision Date 03/13/2014

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	:	APOLLO GREY 966881 D1115UV
Product code	:	CC10150472
Chemical Name	:	Mixture
CAS-No.	:	Mixture

- Mixture
 - **Industrial Applications** :

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-	25973-55-1	5 - 10
bis(1,1-dimethylpropyl)-		
Decanedioic acid, bis(2,2,6,6-tetramethyl-4-	52829-07-9	5 - 10
piperidinyl) ester		
Carbon black	1333-86-4	1 - 5
Iron oxide	1309-37-1	1 - 5
Silica, amorphous	7631-86-9	1 - 5
Rutile, antimony chromium buff	68186-90-3	5 - 10
Titanium dioxide	13463-67-7	30 - 60

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 enduser (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

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Ingestion Eyes	 irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eyes.
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 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. FIREFIGHTING MEASURES
Flash point	: not applicable
Flammable Limits	
Upper explosion limit Lower explosion limit	not applicablenot applicable
Auto-ignition temperature	: not applicable : 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 Hazards	 Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	5. 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.

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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.
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.
Engineering measures	:	

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Components	Value	Exposure time	Exposure type	List:
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
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Silica, amorphous	6 mg/m3	Recommended exposure limit (REL):		NIOSH
	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
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

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	20 mg/m3	Short Term Exposure L (STEL):	imit as T	[]	MX OEL
	9. PHYSI	CAL AND CHEMICAL	PROPERTIES		
Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility		ts S CY B faint V determined V upplicable p	Evapouration rate pecific Gravity sulk density Vapour pressure Vapour density H	: No : No : not : not	t applicable t determined t established applicable applicable applicable
	10. 5	STABILITY AND REA	CTIVITY		
Stability	: T	he product is stable if sto	red and handled as	prescribe	d.
Hazardous Polymerizatio	n : V	Vill not occur.			
Conditions to avoid		Leep away from oxidizing ecomposition, do not ove		ame. To	avoid thermal
Incompatible Materials	: Iı	ncompatible with strong a	cids and oxidizing	agents.	
Hazardous decomposition products		Carbon dioxide (CO2), car NOx), other hazardous ma	,		0

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	
25973-55-1	Phenol, 2-(2H-	Systemic effects	Kidney, Liver, reproductive	
	benzotriazol-2-yl)-4,6-		system.	
	bis(1,1-dimethylpropyl)-			
52829-07-9	Decanedioic acid,	Irritant	Eyes.	
	bis(2,2,6,6-tetramethyl-4-			
	piperidinyl) ester			
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.	
1309-37-1	Iron oxide	Systemic effects	Respiratory system.	
7631-86-9	Silica, amorphous	Irritant	Eyes, Respiratory system.	
68186-90-3	Rutile, antimony	Irritant	Eyes, Skin, Respiratory	
	chromium buff		system.	
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.	

LC50 / LD50



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

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-	Dermal LD50	> 3,100 mg/kg	rabbit
	piperidinyl) ester			
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:

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.

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:

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

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	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.
ICAO/IATA	: 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 Hazardou	us Substances (40 CFR 302)
not applicable	
California Propositior 65	n : Not applicable
SARA Title III Section 302 E	Extremely Hazardous Substance
Unless specific chemicals are	identified under this section, this product is Not Applicable under this regula
SARA Title III Section 313 T	oxic Chemicals.

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Chemical Name			CAS-No.		pplicable under this r Weight percent	
CHROMIUM III COMPOUNDSCHROMIUM II			68186-90-3		5.00 - 10.00	
COMPOUNDSANTIMONY						
COMPOUNDSCHROMIUN	M COMPOUNDS					
nadian Regulations:						
-						
National Pollutant Relea	ase Inventory (NPRI)	<u></u>				
Chemical Name		CAS-No.		Weight		NPRI ID#
Rutile, antimony chromium buff		68186-90-3		percent 5.00 - 10.00		
	0.011	00100)		0100	10100	
WHMIS Classification	: D2A					
WHMIS Ingredient Dis	closure List					
(Thing ingreatent Dis						
CAS-No.						
1333-86-4						
1333-86-4 1309-37-1						
1333-86-4 1309-37-1 68186-90-3						
1333-86-4 1309-37-1						
1333-86-4 1309-37-1 68186-90-3	: All components	s of this pr	roduct are	e on the C	Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9	: All components Substances List				Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL					Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9					Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL					Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL ational Inventories: Australia AICS	Substances List : Listed				Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL ational Inventories:	Substances List				Canadian	Domestic
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1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL ational Inventories: Australia AICS	Substances List				Canadian	Domestic
1333-86-4 1309-37-1 68186-90-3 7631-86-9 DSL ational Inventories: Australia AICS China IECS	Substances List : Listed : Listed				Canadian	Domestic
1333-86-41309-37-168186-90-37631-86-9DSLational Inventories:Australia AICSChina IECSEurope EINECSJapan ENCS	Substances List : Listed : Listed : Listed : Listed : Listed				Canadian	Domestic
1333-86-41309-37-168186-90-37631-86-9DSLational Inventories:Australia AICSChina IECSEurope EINECS	Substances List : Listed : Listed : Listed				Canadian	Domestic
1333-86-41309-37-168186-90-37631-86-9DSLational Inventories:Australia AICSChina IECSEurope EINECSJapan ENCS	Substances List : Listed : Listed : Listed : Listed : Listed				Canadian	Domestic

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