

#### MATERIAL SAFETY DATA SHEET

## **APOLLO COOL GREY 1**

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Revision Date 03/29/2014 Print Date 4/6/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : 1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

number or accident).

Product name : APOLLO COOL GREY 1

Product code : CC10147657 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
1,3,5-Triazine-2,4,6-triamine,N,N"'-1,2-	106990-43-6	1 - 5
ethanediylbis[N-[3-[[4,6-bis[butyl(1,2,2,6,6-		
pentamethyl-4-piperidinyl)amino]-1,3,5-		
triazin		
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-	25973-55-1	1 - 5
bis(1,1-dimethylpropyl)-		
Ethyl benzene	100-41-4	0.1 - 1
Cobalt aluminate blue spinel (C.I. Pigment	1345-16-0	1 - 5
Blue 28)		
Silica, amorphous	7631-86-9	1 - 5
Xylenes (o-, m-, p- isomers)	1330-20-7	1 - 5
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



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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

eves.

Skin : Experience shows no unusual dermatitis hazard from routine handling.

**Chronic exposure** : Refer to Section 11 for Toxicological Information.

Medical Conditions Aggravated by Exposure:

al Conditions : 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 : 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

Hazards

: 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.



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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.

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Keep in a dry, cool place.

8. EXPOSURE 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:
Cobalt aluminate blue spinel (C.I. Pigment	0.02 mg/m3	Time Weighted Average (TWA):	as Co	ACGIH
Blue 28)	mg/ms	(IWA).		
Ethyl benzene	20 ppm	Time Weighted Average (TWA):		ACGIH
	100 ppm	Recommended exposure		NIOSH
	435 mg/m3	limit (REL):		
	125 ppm	Short Term Exposure Limit		NIOSH
	545 mg/m3	(STEL):		
	100 ppm	PEL:		OSHA Z1
	435 mg/m3			
	100 ppm	Time Weighted Average		OSHA Z1A
	435 mg/m3	(TWA):		
	125 ppm	Short Term Exposure Limit		OSHA Z1A
	545 mg/m3	(STEL):		
	100 ppm	Time Weighted Average		MX OEL
	435 mg/m3	(TWA):		
	125 ppm	Short Term Exposure Limit		MX OEL
	545 mg/m3	(STEL):		
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
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL
Xylenes (o-, m-, p-isomers)	100 ppm	Time Weighted Average (TWA):		ACGIH
,	150 ppm	Short Term Exposure Limit (STEL):		ACGIH
	100 ppm 435 mg/m3	PEL:		OSHA Z1
	100 ppm 435 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	150 ppm 655 mg/m3	Short Term Exposure Limit (STEL):		OSHA Z1A
	100 ppm 435 mg/m3	Time Weighted Average (TWA):		MX OEL



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150 ppm	Short Term Exposure Limit	MX OEL
655 mg/m3	(STEL):	

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : solid Evapouration rate Not applicable Not determined Appearance pellets Specific Gravity Colour : GREY Bulk density : Not established Odour : very faint Vapour pressure : not applicable Melting point/range : Not determined Vapour density : not applicable Boiling Point: : not applicable : not applicable pН

Water solubility : insoluble

#### 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.

Hazardous decomposition

products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

(NOx), other hazardous materials, and smoke are all possible.

#### 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
25973-55-1	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-	Systemic effects	Kidney, Liver, reproductive system.
100-41-4	Ethyl benzene	Irritant	Eyes, Skin, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, central nervous system (CNS).
1345-16-0	Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	Irritant	Eyes, Skin, Respiratory system.
		sensitizer	Skin.
7631-86-9	Silica, amorphous	Irritant	Eyes, Respiratory system.



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1330-20-7	Xylenes (o-, m-, p- isomers)	Irritant	Eyes, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, blood and blood forming system, Liver, Kidney, central nervous system (CNS), digestive system.
13463-67-7	Titanium dioxide	Systemic effects	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
100-41-4	Ethyl benzene	Oral LD50	3,500 mg/kg	rat
		Dermal LD50	17800 ul/kg	rabbit
1330-20-7	Xylenes (o-, m-, p-	LC50	5000 ppm/4H	rat
	isomers)	LC50		rat
		Oral	4,300	ratrat
		LD50Oral	mg/kg4,300	rabbit
		LD50	mg/kg	rabbit
		Dermal LD50	> 1,700 mg/kg	
		Dermal LD50	43 g/kg	

### Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
100-41-4	Ethyl benzene	no	2B	no
1345-16-0	Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	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.

## 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



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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.

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 Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Xylenes (o-, m-, p-	1330-20-7	100 lbs	2,273 LB
isomers)			

California Proposition : Not applicable

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SARA Title III Section 302 Extremely Hazardous Substance



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Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

#### SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight percent
COBALT COMPOUNDSCOBALT COMPOUNDS,	1345-16-0	1.00 - 5.00
INORGANICCOBALT COMPOUNDS, ORGANIC		
XYLENE (MIXED ISOMERS)	1330-20-7	1.00 - 5.00

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Cobalt aluminate blue spinel (C.I. Pigment Blue 28)	1345-16-0	1.00 - 5.00	
Xylenes (o-, m-, p- isomers)	1330-20-7	1.00 - 5.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
100-41-4	
7631-86-9	

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



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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 has storage, transportation, disposal and release and is not to be considered a warranty or quali information relates only to the specific material designated and may not be valid for such recombination with any other materials or in any process, unless specified in the text.	ty specification. The