PolyOne

MATERIAL SAFETY DATA SHEET UV GRAY ABS

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1. PRODUCT AND COMPANY IDENTIFICATION						
POLYONE CORPORATI 33587 Walker Road, Avon	YONE CORPORATION 7 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	:	UV GRAY ABS				
Product code	:	CC10140425				
Chemical Name	:	Mixture				
CAS-No.	:	Mixture				
Product Use	:	Industrial Applications				

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Formamide, N,N'-1,6-hexanediylbis[N- (2,2,6,6-tetramethyl-4-piperidinyl)-	124172-53-8	5 - 10
Carbon black	1333-86-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Silica, amorphous	7631-86-9	1 - 5
Titanium dioxide	13463-67-7	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 Eyes	May be harmful if swallowed.Resin particles, like other inert materials, are mechanically irritating to

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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 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 a 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	 not applicable not applicable not applicable 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.
Environmental precautions	: Should not be released into the environment. The product should no 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.

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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:
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
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
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour

: solid : pellets : GREY Evapouration rate:Not applicableSpecific Gravity:Not determined Bulk density

: Not established

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Odour Melting point/range Boiling Point: Water solubility	: N : no	ery faint ot determined ot applicable soluble	Vapour pressure Vapour density pH	:	not applicable not applicable not applicable
	1). STABILITY AND RE	CACTIVITY		
Stability	:	The product is stable if	stored and handled as p	resc	cribed.
Hazardous Polymerization	:	Will not occur.			
Conditions to avoid	:	Keep away from oxidizide decomposition, do not o		ne.	To avoid thermal
Incompatible Materials	:	Incompatible with stron	g acids and oxidizing ag	gent	ts.
Hazardous decomposition products	:	Carbon dioxide (CO2), (NOx), other hazardous			Ũ

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
124172-53-8	Formamide, N,N'-1,6-	Irritant	Eyes.
	hexanediylbis[N-(2,2,6,6-		
	tetramethyl-4-piperidinyl)-		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
68186-90-3	Rutile, antimony	Irritant	Eyes, Skin, Respiratory
	chromium buff		system.
7631-86-9	Silica, amorphous	Irritant	Eyes, Respiratory 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
124172-53-8	Formamide, N,N'-1,6- hexanediylbis[N-(2,2,6,6- tetramethyl-4-piperidinyl)-	LC50 Oral LD50	> 5.0 mg/l > 2,000 mg/kg	rat rat
1333-86-4	Carbon black	Oral LD50 Dermal LD50	> 15,400 mg/kg > 3 gm/kg	rat rabbit

Carcinogenicity

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

olvOn<u>e</u>

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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	
	13. DISPOSAL CONSIDERATIONS	
Product	: Like most thermoplastic plastics the product can be recycled. Whe 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.	

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	14	4. TRANSPOR	T INFOR	ΜΑΤΙΟΝ	N		
U.S. DOT Classification	:	Not regulated f	for transpo	rtation.			
ICAO/IATA	:	Refer to specif	ic regulation	on.			
IMO/IMDG (maritime)	:	Refer to specif	ic regulation	on.			
	15.	REGULATO	RY INFO	RMATIO	N		
US Regulations:							
OSHA Status	:	Classified as ha	azardous b	ased on co	omponen	ts.	
TSCA Status	:	All componen TSCA Inventor		roduct are	e listed or	or exen	npt from the
US. EPA CERCLA Hazardo	us Subs	tances (40 CFR	302)				
not applicable							
65 SARA Title III Section 302 1	Extreme	ly Hazardous S	ubstance				
Unless specific chemicals are	e identif	ied under this s	ection, this	s product i	is Not Ap	plicable	under this regula
SARA Title III Section 313			action the	nroduoti	a Not An	nliashla	under this regul
Unless specific chemicals ar			ection, this				
	e identif	ied under this s		s product i CAS-No 68186-90	Э.		percent
Unless specific chemicals ar Chemical Name CHROMIUM III COMPC	e identif UNDSC	ied under this so		CAS-No	Э.	Weight	percent
Unless specific chemicals ar Chemical Name CHROMIUM III COMPC COMPOUNDSANTIMO	e identif UNDSC	ied under this so		CAS-No	Э.	Weight	percent
Unless specific chemicals ar Chemical Name CHROMIUM III COMPC COMPOUNDSANTIMOI COMPOUNDSCHROMI	e identif UNDSC NY UM COI	ied under this s CHROMIUM II MPOUNDS	1	CAS-No	Э.	Weight	percent
Unless specific chemicals an Chemical Name CHROMIUM III COMPC COMPOUNDSANTIMOI COMPOUNDSCHROMI Canadian Regulations:	e identif UNDSC NY UM COI	ied under this s CHROMIUM II MPOUNDS	1	CAS-No 68186-90	Э.	Weight 1.00 -	percent

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WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

	CAS-No.
	1333-86-4
	68186-90-3
	7631-86-9
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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	:	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.