MATERIAL SAFETY DATA SHEET UV MONROVIA DK GREEN

Version Number 1.1 Revision Date 09/24/2007

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	UV MONROVIA DK GREEN
Product code	CC10104265
Chemical Name	Mixture
CAS-No.	Mixture
Product Use	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
1,6-Hexanediamine,	70624-18-9	1 - 5
N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl)-,		
polymer with 2,4,6-trichloro-1,3,5-triazine,		
reaction products		
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Calcium carbonate	1317-65-3	10 - 30
Chrome yellow (Lead chromate pigment)	1344-37-2	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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eyes.

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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 seel medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable 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 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. Refer to Section 13

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Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.		
torage : Keep containers dry and tightly closed to avoid moisture absorp 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.		

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Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	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
Chrome yellow (Lead chromate pigment)	0.005 mg/m3	Time Weighted Average (TWA):		OSHA
	0.0025 mg/m3	OSHA Action level:		OSHA
	0.1 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.01 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.01 mg/m3	Time Weighted Average (TWA):		MX OEL
	1 mg/m3	PEL:	as Cr	OSHA Z1
	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):		OSHA
	0.03 mg/m3	OSHA Action level:		OSHA
	0.15 mg/m3	Time Weighted Average (TWA):	Dust and fume. as Pb	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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odour Melting point/range Boiling Point: Water solubility Solid
pellets
GREEN
Very faint
Not determined
Not applicable
Insoluble

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not applicable
Not determined
Not established
Not applicable
Not applicable
Not applicable

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	10. STABILITY AND REACTIVITY]
Stability	: Stable.	
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.

<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
70624-18-9	1,6-Hexanediamine,	Irritant	Eyes, Skin, Respiratory system.
	N,N'-bis(2,2,6,6-tetrameth		
	yl-4-piperidinyl)-,polymer		
	with		
	2,4,6-trichloro-1,3,5-triazi		
	ne, reaction products		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
1344-37-2	Chrome yellow (Lead	Systemic effects	central nervous system (CNS),
	chromate pigment)		reproductive 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
70624-18-9	1,6-Hexanediamine,	Oral LD50	> 2,000 mg/kg	rat
	N,N'-bis(2,2,6,6-tetrameth	Dermal LD50	> 3,000 mg/kg	rat
	yl-4-piperidinyl)-,polymer			
	with			
	2,4,6-trichloro-1,3,5-triazi			
	ne, reaction products			
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

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Carcinogenicity

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

OSHA	IARC	NTP
no	2B	no
yes	1	no
l	no	no 2B

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.

Additional Health Hazard Information:

Chrome yellow (Lead chromate pigment) 1344-37-2 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

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

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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.
	1	4. TRANSPORT INFORMATION
U.S. DOT Classification		Not regulated for transportation.
	•	
ICAO/IATA (air)	:	Refer to specific regulation.
IMO / IMDG (maritime)	:	Refer to specific regulation.
	15	S. 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	Sub	stances (40 CFR 302)
Not applicable		
California Proposition 65	:	WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
SARA Title III Section 302 Ext	trem	ely Hazardous Substance
Unless specific chemicals are id	lenti	fied under this section, this product is Not Applicable under this regulation
SARA Title III Section 313 To:	xic C	Chemicals:

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Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation Chemical Name CAS-No. Weight % CHROMIUM VI COMPOUNDSLEAD 1344-37-2 10.00 - 30.00 COMPOUNDSLEAD COMPOUNDS, INORGANIC Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name CAS-No. Weight % NPRI ID# 10.00 - 30.00 Chrome yellow (Lead chromate pigment) 1344-37-2 235 236 10.00 - 30.00 Phthalocyanine blue 147-14-8 1.00 - 5.00 71 WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 1333-86-4 1344-37-2 147-14-8 DSL : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt. National Inventories: Australia AICS Listed ٠ China IECS Listed · Europe EINECS Listed 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 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.