MATERIAL SAFETY DATA SHEET UV EVERGREEN 5 PP

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	:	UV EVERGREEN 5 PP
Product code	:	CC10133472
Chemical Name	:	Mixture
CAS-No.	:	Mixture

: Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Miscellaneous Amine Compound	0-38-4	1 - 5
Fatty acids, C12-21 and C18-unsatd.,	167078-06-0	1 - 5
2,2,6,6-tetramethyl-4-piperidinyl esters		
1,6-Hexanediamine, N,N'-bis(2,2,6,6- tetramethyl-4-piperidinyl)-, polymers with morpholine-2,4,6-trichloro-1,3,5-triazine reaction pr	193098-40-7	1 - 5
Carbon black	1333-86-4	1 - 5
Titanium dioxide	13463-67-7	5 - 10

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			

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Version Number 1.1 Page 2 of 8 Print Date 3/23/2014 Revision Date 03/13/2014 irritating. Ingestion : May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to Eyes : eyes. Skin : Experience shows no unusual dermatitis hazard from routine handling. Chronic exposure : Refer to Section 11 for Toxicological Information. **Medical Conditions** : None known. Aggravated by Exposure: 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 Fullface self-contained breathing apparatus (SCBA) used in positive : pressure mode should be worn to prevent inhalation of airborne Procedures 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.

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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. EXPO	SU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required.
Respiratory protection Eye/Face Protection	:	No personal respiratory protective equipment normally required. Safety glasses with side-shields
	: : :	
Eye/Face Protection	: : :	Safety glasses with side-shields

- : 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)

General Hygiene

Considerations

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Not applicable

Not determined

Not established

not applicable

not applicable

not applicable

:

:

:

:

:

:

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
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

Evapouration rate

Specific Gravity

Vapour pressure

Vapour density

Bulk density

: solid

: pellets

: GREEN

: very faint

: Not determined

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility

: not applicable pH : 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

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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
0-38-4	Miscellaneous Amine	Corrosive	Eyes, Skin, Respiratory
	Compound		system.
		sensitizer	Skin.
167078-06-0	Fatty acids, C12-21 and C18-unsatd., 2,2,6,6- tetramethyl-4-piperidinyl esters	Irritant	Eyes, Skin.
193098-40-7	1,6-Hexanediamine, N,N'- bis(2,2,6,6-tetramethyl-4- piperidinyl)-, polymers with morpholine-2,4,6- trichloro-1,3,5-triazine reaction pr	Irritant	Eyes, Respiratory system.
		Toxic	Refer to LC50 / LD50 Data on MSDS
1333-86-4	Carbon black	Systemic effects	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
0-38-4	Miscellaneous Amine	LC50		rat
	Compound	Oral LD50	1,430 mg/kg	rat
		Dermal LD50	913 mg/kg	rabbit
193098-40-7	1,6-Hexanediamine, N,N'- bis(2,2,6,6-tetramethyl-4- piperidinyl)-, polymers with morpholine-2,4,6- trichloro-1,3,5-triazine reaction pr	LC50	2.8 mg/l	rat
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:

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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. 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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ICAO/IATA	: Refer to specif	ic regulation.		
IMO/IMDG (maritime)	: Refer to specif	ic regulation.		
	15. REGULATO	RY INFORMAT	ION	
US Regulations:				
OSHA Status	: Classified as ha	azardous based or	n components.	
TSCA Status	: All componen TSCA Inventor		are listed on or exe	empt from the
US. EPA CERCLA Hazardo	us Substances (40 CFR	302)		
not applicable				
California Proposition 65	n : Not applicable			
SARA Title III Section 302 I	Extremely Hazardous S	ubstance		
	-		at in Nat Annlinghi	d 4h:
Unless specific chemicals are	identified under this s	ection, this produc	et is not Applicabl	e under uns regul
SARA Title III Section 313	oxic Chemicals:			
Unless specific chemicals are	identified under this s		<u> </u>	
Chemical Name ZINC COMPOUNDS		CAS- 68187		nt percent - 30.00
			ł	
Canadian Regulations:				
	lease Inventory (NPRI)			
Chemical Name		CAS-No.	Weight percent	NPRI ID#
	C L Diamant Vallan	68187-51-9	10.00 - 30.00	
Zinc ferrite brown spinel (C.I. Pigment Yellow			
119)	C.I. Pigment Yellow		5.00 - 10.00	
÷ .		1328-53-6	5.00 - 10.00	

WHMIS Ingredient Disclosure List

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CAS-No.	
1333-86-4	
1328-53-6	

: DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

DSL

Australia AICS	:	Not determined
China IECS	:	Not determined
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.