

### MATERIAL SAFETY DATA SHEET

# **UV Sign Green 356C**

Version Number 1.0 Page 1 of 8

Revision Date 03/21/2007 Print Date 11/27/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

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

number or accident).

Product name : UV Sign Green 356C

Product code : CC10097413 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		
Quartz	14808-60-7	0.1 - 1
Aluminate (Al(OH)63-), (OC-6-11)-,	11097-59-9	1 - 5
magnesium carbonate hydroxide (2:6:1:4)		
Titanium dioxide	13463-67-7	5 - 10
Calcium carbonate	1317-65-3	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 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 : Particulates, like other inert materials can be mechanically irritating.

Excessive inhalation of product vapors, especially during heating or

processing, may be irritating to respiratory system.



### MATERIAL SAFETY DATA SHEET

## UV Sign Green 356C

Version Number 1.0 Page 2 of 8 Revision Date 03/21/2007 Print Date 11/27/2011

> Ingestion : May be harmful if swallowed.

Eyes Particulates, like other inert materials can be mechanically irritating. Skin : Experience shows no unusual dermatitis hazard from routine handling.

: Refer to Section 11 for Toxicological Information. Chronic exposure

**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.

Rinse immediately with plenty of water, also under the eyelids, for at Eyes

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. FIRE-FIGHTING MEASURES

Flash point not applicable

Flammable Limits

Upper explosion limit not applicable Lower explosion limit not applicable Autoignition temperature not applicable

Suitable extinguishing media Carbon dioxide blanket, Water spray, Dry powder, Foamnone.

Special Fire Fighting

Procedures

Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne

Unusual Fire/Explosion

Hazards

contaminants.

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. May

emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire

conditions.

#### 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.



## MATERIAL SAFETY DATA SHEET

## **UV Sign Green 356C**

 Version Number 1.0
 Page 3 of 8

 Revision Date 03/21/2007
 Print Date 11/27/2011

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

of this MSDS for proper disposal methods.

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 : Handle in accordance with good industrial hygiene and safety practice.

Considerations 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)



### MATERIAL SAFETY DATA SHEET

# **UV Sign Green 356C**

 Version Number 1.0
 Page 4 of 8

 Revision Date 03/21/2007
 Print Date 11/27/2011

Components	Value	Exposure time	Exposure type	List:
Aluminate (Al(OH)63-),	2 mg/m3	Time Weighted Average (TWA):	as Al	ACGIH
(OC-6-11)-,				
magnesium carbonate				
hydroxide (2:6:1:4)				
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
Quartz	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.1 mg/m3	Time Weighted Average (TWA):		MX OEL
	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

: Not applicable Form : Solid Evaporation rate : Not determined Appearance : pellets Specific Gravity: : Not established Color : GREEN Bulk density Vapour pressure : Very faint Odour : 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 : 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 : Avoid contact with strong oxidizers. Also, avoid contact with acetal or

acetal copolymers and with amine containing materials during



### MATERIAL SAFETY DATA SHEET

## **UV Sign Green 356C**

 Version Number 1.0
 Page 5 of 8

 Revision Date 03/21/2007
 Print Date 11/27/2011

processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.

Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

### 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
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		
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
11097-59-9	Aluminate (Al(OH)63-),	Irritant	Eyes, Skin.
	(OC-6-11)-, magnesium		
	carbonate hydroxide		
	(2:6:1:4)		
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, 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
70624-18-9	1,6-Hexanediamine,	Oral LD50	> 2,000 mg/kg	rat
	N,N'-bis(2,2,6,6-tetrameth yl-4-piperidinyl)-,polymer with	Dermal LD50	> 3,000 mg/kg	rat
	2,4,6-trichloro-1,3,5-triazi			
	ne, reaction products			

### Carcinogenicity



## MATERIAL SAFETY DATA SHEET

## **UV Sign Green 356C**

Version Number 1.0 Page 6 of 8

Revision Date 03/21/2007 Print Date 11/27/2011

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
14808-60-7	Quartz	no	1	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.

## **Additional Health Hazard Information:**

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

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.



### MATERIAL SAFETY DATA SHEET

# **UV Sign Green 356C**

 Version Number 1.0
 Page 7 of 8

 Revision Date 03/21/2007
 Print Date 11/27/2011

ICAO/IATA (air) : 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)

not applicable

California Proposition : Not applicable

65

SARA Title III Section 302 Extremely Hazardous Substance

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

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Phthalocyanine blue	147-14-8	0.10 - 1.00	71
Phthalocyanine green	1328-53-6	1.00 - 5.00	71
Zinc stearate	557-05-1	0.10 - 1.00	231

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.



### MATERIAL SAFETY DATA SHEET

# **UV Sign Green 356C**

 Version Number 1.0
 Page 8 of 8

 Revision Date 03/21/2007
 Print Date 11/27/2011

11097-59-9 1328-53-6

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 : 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.