

MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

Version Number 1.0 Revision Date 06/24/2002 Page 1 of 7 Print Date 11/5/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	SPRUCE GREEN (R-8723)
Product code	:	CC10018656
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	0.1 - 1
Titanium dioxide	13463-67-7	5 - 10
Chromium (III) oxide	1308-38-9	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. 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
Skin	eyes. : Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.



MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

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 see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion	 Not applicable Not applicable Not relevant Carbon dioxide blanket, Water spray, dry powder, foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None
Hazards	
	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. Refer to Section 1 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.



MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

Version Number 1.0 Revision Date 06/24/2002

Page 3 of 7 Print Date 11/5/2011

Keep containers dry and tightly closed to avoid moisture absorption Storage : 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 Safety shoes. : Measures General Hygiene Handle in accordance with good industrial hygiene and safety practice. : Considerations Wash hands before breaks and at the end of workday. Heat only in areas with appropriate exhaust ventilation. Provide Engineering measures : appropriate exhaust ventilation at machinery.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average	Total dust. as carbon	ACGIH
		(TWA):	black	
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon	OSHA Z1
			black	
Chromium (III) oxide	0.5 mg/m3	Time Weighted Average	as Cr	ACGIH
		(TWA):		
Titanium dioxide	10 mg/m3	Time Weighted Average	Total dust.	ACGIH
	_	(TWA):		
Titanium dioxide	15 mg/m3	PEL:	Total dust.	OSHA Z1

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility

: Pellets : GREEN : Very faint : Not determined : Not applicable : Insoluble

: Solid

Evaporation rate Specific Gravity Bulk density Vapor pressure Vapor density pН

Not applicable. : Not determined Not established : Not applicable : Not applicable : Not applicable

:

:

10. STABILITY AND REACTIVITY

Stability

: Stable.



MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

 Version Number 1.0 Revision Date 06/24/2002
 Page 4 of 7 Print Date 11/5/2011

 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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.

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
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
1333-86-4	Carbon black	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:



MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

Version Number 1.0 Revision Date 06/24/2002 Page 5 of 7 Print Date 11/5/2011

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). 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:

Chromium (III) oxide 1308-38-9 The trivalent form has a low order of acute toxicity but may cause dermatitis, pulmonary sensitization and corrosive effect on eyes.

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Additional advice	: No data available.
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastics 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 materia 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. D.O.T. / CA T.D.G. Classification (Non-bulk ground)	: Not regulated for transportation.
ICAO/IATA	: Not regulated for transportation.
IMO / IMDG	: Not regulated for transportation.



MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

Version Number 1.0 Revision Date 06/24/2002 Page 6 of 7 Print Date 11/5/2011

	15. REGULATOR	RY INFORMATIO	DN	
US Regulations:				
OSHA Status	: Classified as ha	zardous based on c	omponents.	
TSCA Status	: All components exempt.	s of this product are	listed on the TSCA invent	ory or are
US. EPA CERCLA Hazardo	us Substances (40 CFR	302)		
Not applicable				
California Propositio 65	n : This product do	es not contain a sul	ostance listed by California	a Prop 65
SARA Title III Section 313	Foxic Chemicals:			
SARA THE III SECTOR 515				
Chemical Nat	ne	CAS-No.	Weight %	
Chemical Nat		CAS-No. 1308-38-9	Weight % 23.80	
Chemical Nat CHROMIUM	ne			
Chemical Nat CHROMIUM	ne I III COMPOUNDS			
Chemical Nan CHROMIUM Canadian Regulations:	me I III COMPOUNDS			
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classification	me I III COMPOUNDS			
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classificatio WHMIS Ingredient D CAS-No.	me I III COMPOUNDS			
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classificatio WHMIS Ingredient D CAS-No. 1308-38-9	me I III COMPOUNDS on : D2A visclosure List			
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classificatio WHMIS Ingredient D CAS-No. 1308-38-9 DSL	me I III COMPOUNDS on : D2A visclosure List			
Chemical National Inventories:	me III COMPOUNDS			
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classification WHMIS Ingredient D CAS-No. 1308-38-9 DSL National Inventories: Australia AICS	me III COMPOUNDS	1308-38-9		
Chemical Nat CHROMIUM Canadian Regulations: WHMIS Classification WHMIS Ingredient D CAS-No. 1308-38-9 DSL National Inventories: Australia AICS China IECS	ne III COMPOUNDS	1308-38-9		

ne.

MATERIAL SAFETY DATA SHEET

SPRUCE GREEN (R-8723)

Version Number 1.0 Revision Date 06/24/2002

> **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.

Page 7 of 7 Print Date 11/5/2011