## MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007

Page 1 of 7 Print Date 11/27/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	USP 1203 Green Additive
Product code	:	FO20016263
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
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 for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye/skin irritation.
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.

PolyOne.

# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 2 of 7 Print Date 11/27/2011

	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 or 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 for at least 15 minutes. If ey 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	: no data available
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	<ul> <li>no data available</li> <li>no data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> <li>6. ACCIDENTAL RELEASE MEASURES</li> </ul>
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or th soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
Handling	: Heat only in areas with appropriate exhaust ventilation. Processing



# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 3 of 7 Print Date 11/27/2011

fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.

Storage

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry 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 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.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Silica, amorphous	20 mppcf	PEL:	Total dust.	OSHA
	20 mppcf	PEL:	Total dust.	Z3
	0.8 mg/m3	Time Weighted Average		Z3
		(TWA):		
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	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
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance : liquid: Viscous, liquid

Evaporation rate Specific Gravity: Not establishedNot determined

# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 4 of 7 Print Date 11/27/2011

Color Odour Melting point/range Boiling Point: Water solubility	: GREENBulk density: Not applicable: Very faintVapour pressure: Not determined: Not applicableVapour density: Not determined: Not applicablepH: Not applicable: Immiscible: Immiscible: Not applicable			
	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., Avoid contact with acetal homopolymers and acetal copolymers during processing.			
Hazardous decomposition products	<ul> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).</li> </ul>			

### **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
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
7631-86-9	Silica, amorphous	Oral	15,000	mouserat
		LD50Oral	mg/kg22,500	
		LD50	mg/kg	

Carcinogenicity

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

		CAS-No.	Chemical Name	OSHA	IARC	NTP
--	--	---------	---------------	------	------	-----

PolyOne.

# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 5 of 7 Print Date 11/27/2011

13463-67-7 Т	itanium dioxide	no	2B	no
IARC Carcinogen Classif 1 - The component is carc 2A - The component is pr 2B - The component is po NTP Carcinogen Classific 1 - The component is kno 2 - The component is reas	inogenic to humans. obably carcinogenic to hu ssibly carcinogenic to hur cations: wn to be a human carcinog	nans. gen.		
	12. ECOLOGICA	AL INFORMATION		
Persistence and degradabi	lity : Not readily bio	odegradable.		
Environmental Toxicity	: Environmental whole.	toxicity has not been	established for this	s mixture as a
Bioaccumulation Potentia	l : no data availab	le		
Additional advice	: no data availab	le		
	13. DISPOSAL (	CONSIDERATIONS		
Product Contaminated packaging	generator of w classification, t applicable fede : Recycling is pr has the response	e recycling is preferred aste material has the re- transportation and disp eral, state/provincial ar referred when possible sibility for proper wast	esponsibility for prosal in accordance osal in accordance d local regulation . The generator of e classification, tra	oper waste e with s. waste materia ansportation
	and disposal in and local regul	accordance with apple ations.	icable federal, stat	e/provincial
	14. TRANSPOR	T INFORMATION		
U.S. DOT Classification	: Refer to specif	ic regulation.		
ICAO/IATA (air)	: Refer to specif	ic regulation.		
IMO / IMDG (maritime)	: Refer to specif	ic regulation.		
	15. REGULATO	RY INFORMATION		
US Regulations:				
OSHA Status	: Classified as h	azardous based on con	ponents.	

Polv<u>One</u>

# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 6 of 7 Print Date 11/27/2011

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 green	1328-53-6	5.00 - 10.00	71

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
1328-53-6	
7631-86-9	

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	:	Not determined
China IECS	:	Not determined
Europe EINECS	:	Listed
Japan ENCS	:	Not determined

:

# MATERIAL SAFETY DATA SHEET USP 1203 Green Additive

Version Number 1.0 Revision Date 03/28/2007 Page 7 of 7 Print Date 11/27/2011

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.