

#### MATERIAL SAFETY DATA SHEET

#### Sage

Version Number 1.1 Revision Date 01/20/2004

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#### **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	:	Sage
Product code	:	CC10009306
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

# : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Manganese antimony titanium brown rutile	68412-38-4	1 - 5
(C.I. Pigment Yellow 164)		
Nickel iron chromite black spinel (C.I.	71631-15-7	10 - 30
Pigment Black 30)		
Rutile, antimony chromium buff	68186-90-3	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.
Ingestion	: May be harmful if swallowed.
Eyes Skin	<ul><li>Particulates, like other inert materials can be mechanically irritating.</li><li>Experience shows no unusual dermatitis hazard from routine handling.</li></ul>



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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 Hazards	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Carbon dioxide blanket, water spray, dry powder, foamnone.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>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.</li> </ul>
	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 1 of this MSDS for proper disposal methods.



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	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. EXP	OSUF	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:
Nickel iron chromite	0.5 mg/m3	PEL:	as Cr	OSHA Z1
black spinel (C.I.				
Pigment Black 30)				
	1 mg/m3	PEL:	as Ni	OSHA Z1
	0.5 mg/m3	Time Weighted Average	as Cr	ACGIH
		(TWA):		
	0.2 mg/m3	Time Weighted Average	Inhalable fraction. as	ACGIH
		(TWA):	Ni	
Manganese antimony	5 mg/m3	Ceiling Limit Value:	Dust. as Mn	OSHA Z1
titanium brown rutile				
(C.I. Pigment Yellow				
164)				
	0.5 mg/m3	PEL:	Dust. as Sb	OSHA Z1
	0.2 mg/m3	Time Weighted Average	as Mn	ACGIH
		(TWA):		
	0.5 mg/m3	Time Weighted Average	as Sb	ACGIH
		(TWA):		
Rutile, antimony chromium buff	1 mg/m3	PEL:		OSHA Z1
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average	as Cr	ACGIH
		(TWA):		
	0.5 mg/m3	Time Weighted Average	as Sb	ACGIH
		(TWA):		
9. PHYSICAL AND CHEMICAL PROPERTIES				

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

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

Specific Gravity: Bulk density Vapor pressure Vapour density pН

Evaporation rate : Not applicable : Not determined

: Not established

: Not applicable

: Not applicable : 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	:	Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace



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	quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.
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 (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.</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
68412-38-4	Manganese antimony	Irritant	Eyes, Skin.
	titanium brown rutile (C.I.		
	Pigment Yellow 164)		
71631-15-7	Nickel iron chromite black	Irritant	Eyes, Skin.
	spinel (C.I. Pigment Black		
	30)		
		sensitizer	Skin.
68186-90-3	Rutile, antimony	Irritant	Eyes, Skin, Respiratory system.
	chromium buff		

Carcinogenicity

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

CAS-No. Chemical Name OSHA IARC NTP
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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:

Nickel iron chromite black spinel (C.I. Pigment Black 30) 71631-15-7 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney andmuscle effects.

#### Additional Health Hazard Information:



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Rutile, antimony chromium buff 68186-90-3 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the matri of the polymer.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the matri of the polymer.
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 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. DOT Classification	: Not regulated for transportation.
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	



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California Proposition 65 : WARNING! This product contains a chemical known to the State of California to cause cancer.

SARA Title III Section 302 Extremely Hazardous Substance

Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
CHROMIUM III COMPOUNDSNICKEL	71631-15-7	16.00
COMPOUNDS		
CHROMIUM III COMPOUNDSANTIMONY	68186-90-3	46.90
COMPOUNDS		
MANGANESE COMPOUNDSANTIMONY	68412-38-4	2.25
COMPOUNDS		

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Nickel iron chromite black spinel (C.I. Pigment	71631-15-7	16.00	68
Black 30)			
Nickel iron chromite black spinel (C.I. Pigment	71631-15-7	16.00	168
Black 30)			
Manganese antimony titanium brown rutile (C.I.	68412-38-4	2.25	147
Pigment Yellow 164)			
Manganese antimony titanium brown rutile (C.I.	68412-38-4	2.25	17
Pigment Yellow 164)			
Rutile, antimony chromium buff	68186-90-3	46.90	68
Rutile, antimony chromium buff	68186-90-3	46.90	17

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
71631-15-7	
68412-38-4	
68186-90-3	

:

DSL

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



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National Inventories:

Australia AICS	: Not determined
China IECS	: Not determined
Europe EINECS	: Not determined
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 when used in combination with any other materials and/or in any particular process or processing conditions.