PolyOne

## MATERIAL SAFETY DATA SHEET **D4014 RED**

Version Number 1.0 Revision Date 09/28/2007

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

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

Telephone : Emergency telephone :	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	D4014 RED
Product code	:	FO20017372
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1
Calcium oxide	1305-78-8	1 - 5
Lead chromate	7758-97-6	1 - 5
Lead oxide sulfate (Pb4O3(SO4))	12202-17-4	1 - 5

#### 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

<b>Routes of Exposure:</b>	: 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.

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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 o 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	<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> </ul>
Special Fire Fighting Procedures	: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards	<ul> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>
	6. ACCIDENTAL RELEASE MEASURES
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.



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		7. HANDLING AND STORAGE
Handling	:	Heat only in areas with appropriate exhaust ventilation. Processing 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. EXF	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.
Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
Calcium oxide	2 mg/m3	Time Weighted Average (TWA):		ACGIH
	5 mg/m3	PEL:		OSHA Z1
	2 mg/m3	Time Weighted Average (TWA):		MX OEL
Lead chromate	0.012 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.05	Time Weighted Average	as Pb	ACGIH
	mg/m3	(TWA):		
	0.005	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.0025	OSHA Action level:		OSHA
	mg/m3			
	0.1 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.01	Time Weighted Average		MX OEL
	mg/m3	(TWA):		
	1 mg/m3	PEL:	as Cr	OSHA Z1
	0.05	Time Weighted Average		OSHA
	mg/m3	(TWA):		
	0.03	OSHA Action level:		OSHA
	mg/m3			
	0.15	Time Weighted Average	Dust and fume. as Pb	MX OEL
	mg/m3	(TWA):		
Lead oxide sulfate (Pb4O3(SO4))	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):		OSHA
	0.03 mg/m3	OSHA Action level:		OSHA
	0.15	Time Weighted Average	Dust and fume. as Pb	MX OEL
	mg/m3	(TWA):		
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):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

liquid
Viscous, liquid
RED
Very faint
Not applicable
Not applicable
Immiscible

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH Not established
Not determined
Not applicable
Not determined
Not determined
Not applicable

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	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	: 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).		

#### 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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1305-78-8	Calcium oxide	Irritant	Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
		Corrosive	Skin.
7758-97-6	Lead chromate	Systemic effects	central nervous system (CNS), reproductive system.
12202-17-4	Lead oxide sulfate	Systemic effects	reproductive system, central
	(Pb4O3(SO4))		nervous system (CNS).

LC50 / LD50

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

I	CAS-No.	Chemical Name	Route	Value	Species
	7758-97-6	Lead chromate	Oral LD50	> 12 gm/kg	mouse

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

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7758-97-6	Lead chromate	yes	1	no
12202-17-4	Lead oxide sulfate (Pb4O3(SO4))	yes	2A	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:

Lead chromate 7758-97-6 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

### Additional Health Hazard Information:

Lead oxide sulfate (Pb4O3(SO4)) 12202-17-4 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: No data available
Additional advice	: No data available
	13. DISPOSAL CONSIDERATIONS
Product	: 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 materi 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	: Refer to specific regulation.

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Lead oxide sulfate (Pb4O3(SO4))

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ICAO/IATA (air)	: Rei	er to specific regulation.
IMO / IMDG (maritime)	: Ret	er to specific regulation.
	15. RF	GULATORY INFORMATION
US Regulations:		
OSHA Status	: Cla	ssified as hazardous based on components.
TSCA Status		components of this product are listed on or exempt from the TSCA entory.
US. EPA CERCLA Hazardou	s Substanc	es (40 CFR 302)
Not applicable		
California Proposition 65	Cal che	ARNING! This product contains a chemical known to the State of ifornia to cause cancer., WARNING! This product contains a mical known to the State of California to cause birth defects or er reproductive harm.
SARA Title III Section 302 E	xtremely I	azardous Substance
		under this spation, this product is Not Applicable under this result
Unless specific chemicals are	identified	inder this section, this product is Not Addicable under this regula
Unless specific chemicals are	identified	under this section, this product is Not Applicable under this regula
SARA Title III Section 313 T	oxic Cherr	icals:
SARA Title III Section 313 T	oxic Cherr	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU	oxic Chem identified JNDSLEA	icals: under this section, this product is Not Applicable under this regula CAS-No. Weight % D 7758-97-6 0.10 - 1.00
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU COMPOUNDSLEAD COM	oxic Chem identified JNDSLEA APOUNDS	icals: under this section, this product is Not Applicable under this regula CAS-No. Weight % D 7758-97-6 0.10 - 1.00 5, INORGANIC
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU	oxic Chem identified JNDSLEA APOUNDS	icals: under this section, this product is Not Applicable under this regula CAS-No. Weight % D 7758-97-6 0.10 - 1.00 5, INORGANIC
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU COMPOUNDSLEAD COM LEAD COMPOUNDSLEA	oxic Chem identified JNDSLEA APOUNDS	icals: under this section, this product is Not Applicable under this regula CAS-No. Weight % D 7758-97-6 0.10 - 1.00 5, INORGANIC
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SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU COMPOUNDSLEAD COM LEAD COMPOUNDSLEA INORGANIC Canadian Regulations:	oxic Chem identified JNDSLEA <u>APOUNDS</u> D COMPO	icals: <u>under this section, this product is Not Applicable under this regula</u> <u>CAS-No. Weight %</u> D 7758-97-6 0.10 - 1.00 <u>5, INORGANIC</u> DUNDS, 12202-17-4 1.00 - 5.00
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM VI COMPOU COMPOUNDSLEAD COM LEAD COMPOUNDSLEA INORGANIC Canadian Regulations: National Pollutant Refe	oxic Chem identified JNDSLEA <u>APOUNDS</u> D COMPO	icals: <u>under this section, this product is Not Applicable under this regula</u> <u>CAS-No. Weight %</u> D 7758-97-6 0.10 - 1.00 <u>A, INORGANIC</u> DUNDS, 12202-17-4 1.00 - 5.00 ory (NPRI)

12202-17-4

1.00 - 5.00

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WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 1305-78-8 7758-97-6 12202-17-4 DSL All components of this product are on the Canadian Domestic : Substances List (DSL) or are exempt. National Inventories: Australia AICS Listed : China IECS Not determined · Europe EINECS Listed :

Japan ENCS:Not determinedKorea KECI:Not determinedPhilippines 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.