MATERIAL SAFETY DATA SHEET V1784 RED

Version Number 1.0 Revision Date 06/19/2007

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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	:	V1784 RED
Product code	:	FO20016829
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

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 Ingestion Eyes Skin	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. 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.



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	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, also under the eyelids, for at 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	 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. 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.
	5. 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.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation. Processing fume



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	c	ondensates may contain combu lean hoods, ducts, and other sum nese materials.		
Storage		Leep containers dry and tightly nd contamination. Keep in a d		e absorption
8.]	EXPOSURE	CONTROLS / PERSONAL	PROTECTION	
Respiratory protection		to personal respiratory protections occur wear app		
Eye/Face Protection	: S	afety glasses with side-shields		
Hand protection	: P	Protective gloves		
Skin and body protection	: L	ong sleeved clothing		
Additional Protective Measures	: S	afety shoes		
General Hygiene Considerations		Iandle in accordance with good Vash hands before breaks and a		safety practice.
	К. н		t the end of workday. ate exhaust ventilation.	
Considerations	К. н	Vash hands before breaks and a leat only in areas with appropri	t the end of workday. ate exhaust ventilation.	
Considerations Engineering measures Exposure limit(s)	V : H aj	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a	at the end of workday. Tate exhaust ventilation. Tat machinery.	Provide
Considerations Engineering measures	К. н	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average	t the end of workday. ate exhaust ventilation.	
Considerations Engineering measures Exposure limit(s) Components	Value 10 mg/m3	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA):	at the end of workday. The exhaust ventilation. The machinery. Exposure type	Provide List: ACGIH
Considerations Engineering measures Exposure limit(s) Components	W : H aj Value	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a <u>Exposure time</u> Time Weighted Average (TWA): <u>PEL:</u> Time Weighted Average	at the end of workday. Tate exhaust ventilation. Tat machinery.	Provide List:
Considerations Engineering measures Exposure limit(s) Components	Value 10 mg/m3	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a <u>Exposure time</u> Time Weighted Average (TWA): PEL:	at the end of workday. Total dust.	Provide List: ACGIH OSHA Z1
Considerations Engineering measures Exposure limit(s) Components	Value 10 mg/m3 15 mg/m3 20 mg/m3	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a <u>Exposure time</u> Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit	t the end of workday. ate exhaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti	Provide List: ACGIH OSHA Z1 MX OEL
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide	Value 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	t the end of workday. at eachaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti PERTIES	Provide List: ACGIH OSHA Z1 MX OEL MX OEL
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide	Value 10 mg/m3 15 mg/m3 20 mg/m3 9. PHYSIC : Solic	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a <u>Exposure time</u> Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO	t the end of workday. at eachaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti PERTIES ration rate : Not	Provide List: ACGIH OSHA Z1 MX OEL MX OEL
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide Form Appearance	Value 10 mg/m3 15 mg/m3 10 mg/m3 20 mg/m3 9. PHYSIC : Solic : powo	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO der, granular	t the end of workday. at eachaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti PERTIES ration rate : Not c Gravity : Not	Provide List: ACGIH OSHA Z1 MX OEL MX OEL t applicable t determined
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide Form Appearance Color	Value 10 mg/m3 15 mg/m3 10 mg/m3 20 mg/m3 20 mg/m3 9. PHYSIC : Solic : powc : RED	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO der, granular Specifi Bulk der	t the end of workday. at eachaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti PPERTIES ration rate : Noi c Gravity : Noi ensity : Noi	Provide List: ACGIH OSHA Z1 MX OEL MX OEL MX OEL
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide Form Appearance Color Odour	Value 10 mg/m3 15 mg/m3 10 mg/m3 20 mg/m3 9. PHYSIC : Solic : powo : RED : Very	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO der, granular Specifi D Bulk der faint Vapour	t the end of workday. Tate exhaust ventilation. at machinery. Exposure type Total dust. as Ti as Ti PERTIES Fation rate : Not c Gravity : Not ensity : Not r pressure : Not	Provide List: ACGIH OSHA Z1 MX OEL MX OEL t applicable t determined t applicable
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide Form Appearance Color Odour Melting point/range	Value 10 mg/m3 15 mg/m3 10 mg/m3 20 mg/m3 20 mg/m3 9. PHYSIO : Solic : powo : RED : Very : Not of	Vash hands before breaks and a leat only in areas with appropri ppropriate exhaust ventilation a Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO der, granular Specifi D Bulk der faint Vapour determined Vapour	Exposure type	Provide List: ACGIH OSHA Z1 MX OEL MX OEL MX OEL
Considerations Engineering measures Exposure limit(s) Components Titanium dioxide Form Appearance Color Odour	Value 10 mg/m3 15 mg/m3 10 mg/m3 20 mg/m3 20 mg/m3 9. PHYSIO : Solic : powo : RED : Very : Not of	Vash hands before breaks and a Ieat only in areas with appropriate exhaust ventilation a ppropriate exhaust ventilation a Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): Short Term Exposure Limit (STEL): CAL AND CHEMICAL PRO der, granular Specifi y faint Vapour applicable pH	Exposure type	Provide List: ACGIH OSHA Z1 MX OEL MX OEL t applicable t determined t applicable

10. STABILITY AND REACTIVITY



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Stability	:	Stable.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	To avoid thermal decomposition, do not overheat. Keep away from oxidizing agents and open flame.
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 (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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

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

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.

12. ECOLOGICAL INFORMATION

Persistence and degradability : Not rea

: Not readily biodegradable.

Environmental Toxicity

: Adverse ecological impact is not known or expected under normal use.





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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 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)	: Not regulated for transportation.
IMO / IMDG (maritime)	: Not regulated for transportation.
	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 65	: Not applicable
SARA Title III Section 302 Ex	tremely Hazardous Substance



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SARA Title III Section 313 Tox	ic (Chemicals:		
Unless specific chemicals are id	enti	fied under this section, this product is Not Appli	cable under th	nis regulatior
Canadian Regulations:				
National Pollutant Release	se I	nventory (NPRI)		
Not applicable				
WHMIS Classification	:	D2A		
DSL	:	All components of this product are on the Can Substances List (DSL) or are exempt.	adian Domest	ic
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 used in combination with any other materials or in any process, unless specified in the text.