

MATERIAL SAFETY DATA SHEET

SHU SHU RED

Version Number 1.0 Revision Date 02/12/2002 Page 1 of 5 Print Date 11/3/2011

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	:	SHU SHU RED
Product code	:	CC10010440
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	1 - 5

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 fumes may be released upon heating or crosslinking and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect his employee from exposure. See Sections 3 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact		
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.		
4. FIRST AID MEASURES			

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SHU SHU RED Version Number 1.0 Page 2 of 5 Print Date 11/3/2011 Revision Date 02/12/2002 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 at : least 15 minutes. If eye irritation persists, seek medical attention. Skin : Wash off with soap and plenty of water. If skin irritation persists seek medical attention. **5. FIRE-FIGHTING MEASURES** Flash point Not applicable : Flammable Limits Upper explosion limit Not applicable : Not applicable Lower explosion limit : Autoignition temperature Not relevant : Suitable extinguishing media Carbon dioxide blanket, Water spray, dry powder, foam. : Special Fire Fighting Fullface self-contained breathing apparatus (SCBA) used in positive : Procedures pressure mode should be worn to prevent inhalation of airborne contaminants. Unusual Fire/Explosion · 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 not be allowed to enter drains, water courses or the soil. Methods for cleaning up : Clean up promptly by scoop or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 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. Keep containers dry and tightly closed to avoid moisture absorption Storage : and contamination. Keep in a dry, cool place.



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ð. F	8. EXPOSURE CONTROLS / PERSONAL PROTECTION				
Respiratory protection		No personal respiratory pro lusty conditions occur wea			
Eye/Face Protection	: s	afety glasses			
Hand protection	: F	Protective gloves.			
Skin and body protection	: I	long sleeved clothing.			
Additional Protective Measures	: S	Safety shoes.			
General Hygiene Considerations	р	Wash hands and face before product. Handle in accordate practice for diagnostics.			
Engineering measures		Heat only in areas with app ppropriate exhaust ventila		tilation.	Provide
Exposure limit(s)					
Components	Value	Exposure time	Exposure t	vne	List:
Components Titanium dioxide	Value 10 mg/m3	Exposure time Time Weighted Average	Exposure t ge Total dus		List: ACGIH
	10 mg/m3	Time Weighted Averag (TWA):	ge Total dus	st.	ACGIH
		Time Weighted Average		st.	
	10 mg/m3 15 mg/m3	Time Weighted Averag (TWA): PEL:	ge Total dus Total dus	st.	ACGIH
	10 mg/m3 15 mg/m3	Time Weighted Averag (TWA):	ge Total dus Total dus	st.	ACGIH
Titanium dioxide	10 mg/m3 15 mg/m3 9. PHYSIO : Solid	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Ev	ge Total dus Total dus PROPERTIES vaporation rate	st. st. : Not	ACGIH OSHA Z1 applicable.
Titanium dioxide Form Appearance	10 mg/m3 15 mg/m3 9. PHYSIC : Solic : flake	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d E ^r es SI	ge Total dus Total dus Total dus PROPERTIES vaporation rate pecific Gravity	st. st. : Not : Not	ACGIH OSHA Z1 applicable. determined
Titanium dioxide Form Appearance Color	10 mg/m3 15 mg/m3 9. PHYSIC : Solic : flake : REE	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d E ^r es S _I D Bi	ge Total dus Total dus PROPERTIES vaporation rate pecific Gravity ulk density	st. st. : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined
Titanium dioxide Form Appearance Color Odor	10 mg/m3 15 mg/m3 9. PHYSIC : Solic : flake : RED : Very	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Even Sp D Br y faint V	ge Total dus Total dus PROPERTIES vaporation rate pecific Gravity ulk density apor pressure	st. st. : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined
Titanium dioxide Form Appearance Color Odor Melting point/range	10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : RED : Very : Grea	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Even SI D Br y faint V ater than 130 Deg C V	ge Total dus Total dus Total dus PROPERTIES vaporation rate pecific Gravity ulk density apor pressure apor density	st. st. : Not : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined determined
Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : RED : Very : Grea	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Er es SI D Bi y faint V ater than 130 Deg C V applicable pI	ge Total dus Total dus PROPERTIES vaporation rate pecific Gravity ulk density apor pressure	st. st. : Not : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined
Titanium dioxide Form Appearance	10 mg/m3 15 mg/m3 9. PHYSIC : Solic : flake : REE : Very : Grea : Not : Inso	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Er es SI D Bi y faint V ater than 130 Deg C V applicable pI	ge Total dus Total dus Total dus PROPERTIES vaporation rate becific Gravity ulk density apor pressure apor density H	st. st. : Not : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	10 mg/m3 15 mg/m3 9. PHYSIC : Solid : flake : REL : Very : Grea : Not : Inso 10. §	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Eres Sp by faint V ater than 130 Deg C V applicable pH luble	ge Total dus Total dus Total dus PROPERTIES vaporation rate becific Gravity ulk density apor pressure apor density H	st. st. : Not : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined determined
Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point: Water solubility	10 mg/m3 15 mg/m3 9. PHYSIO : Solid : flake : RED : Very : Grea : Not : Inso 10. S : S	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Even es Sp D Bi y faint V ater than 130 Deg C V applicable pH luble	ge Total dus Total dus Total dus PROPERTIES vaporation rate becific Gravity ulk density apor pressure apor density H	st. st. : Not : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined determined
Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point: Water solubility Stability	10 mg/m3 15 mg/m3 9. PHYSIO : Solid : flake : RED : Very : Grea : Not : Inso 10. S n : V	Time Weighted Averag (TWA): PEL: CAL AND CHEMICAL d Events of a s SI by faint V ater than 130 Deg C V applicable pH luble STABILITY AND REAC	ge Total dus Total dus PROPERTIES vaporation rate becific Gravity ulk density apor pressure apor density H	st. st. : Not : Not : Not : Not	ACGIH OSHA Z1 applicable. determined determined determined determined



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Hazardous decomposition products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. TOXICOLOGICAL INFORMATION

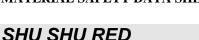
This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.			
		CAL INFORMATION	I			
	12, ECOLOGIC					
Persistence and degrada	ability : Not readily b	iodegradable.				
Environmental Toxicity		 Chemicals are not readily available as they are bound within the matrix of the polymer. Not inherently biodegradable. 				
Bioaccumulation Poten	tial : Not inherently					
Additional advice	: Chemicals are of the polyme		s they are bound within the matrix			
	13. DISPOSAL	CONSIDERATIONS	5			
Product	generator of v classification	waste material has the r	d to disposal or incineration. The esponsibility for proper waste posal in accordance with nd local regulations.			
Contaminated packagin	has the respon- and disposal i	: Recycling is preferred when possible. 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.				
	14. TRANSPO	RT INFORMATION				
U.S. D.O.T. / CA T.D. Classification (Non-bul ground)		for transportation.				
ICAO/IATA	: Not regulated	: Not regulated for transportation.				
IMO / IMDG	: Not regulated	: Not regulated for transportation.				
	15. REGULATO	ORY INFORMATION	J			

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US Regulations:		
OSHA Status	:	Classified as hazardous based on components.
TSCA Status	:	All components of this product are listed on the TSCA inventory or are exempt.
California Proposition 65	:	This product does not contain a substance listed by California Prop 65.
Canadian Regulations:		
WHMIS Classification	:	D2B
DSL	:	Listed.
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 OTHED INFORMATION

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.