

MATERIAL SAFETY DATA SHEET

SAPPHIRE BLUE

Version Number 1.0 Revision Date 01/15/2002 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	:	SAPPHIRE BLUE
Product code	:	CC10006728
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	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. 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 his employee from exposure. See sections 3 and 11 for special precautions.

POTENTIAL HEALTH EFFECTS

: Inhalation, Skin contact, Ingestion
: Inhalation of airborne droplets may cause irritation of the respiratory tract.
: May be harmful if swallowed.
: No known effects.
: Experience shows no unusual dermatitis hazard from routine handling.
: Refer to Section 11 for Toxicological Information.
: None known.



MATERIAL SAFETY DATA SHEET

SAPPHIRE BLUE

Version Number 1.0 Revision Date 01/15/2002 Page 2 of 5 Print Date 11/3/2011

	4. FIRST AID MEASURES	
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Seek medical attention after significant exposure.	
Ingestion	: Do not induce vomiting without medical advice. Seek medical attention if necessary.	
Eyes	: Rinse immediately with plenty of water for at least 15 minutes. If existing irritation persists, seek medical attention.	<i>'</i> e
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.	k
	5. FIRE-FIGHTING MEASURES	
Flash point	: Greater than 200 Deg F	
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable. Not applicable. Not applicable. Carbon dioxide blanket, dry powder, foam. 	
Special Fire Fighting Procedures Unusual Fire/Explosion	 Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. None 	
Hazards		
	. 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.	t
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.	r,
	7. HANDLING AND STORAGE	
Handling	: Heat only in areas with appropriate exhaust ventilation.	
Storage	: Keep containers dry and tightly closed to avoid moisture absorption	



MATERIAL SAFETY DATA SHEET

SAPPHIRE BLUE

ision Date 01/15/2002			Print	Page 3 Date 11/3/2
	ar	nd contamination. Store in a	cool dry place.	
8. 1	EXPOSURE	CONTROLS / PERSONAL	PROTECTION	
Respiratory protection	: U	nder normal handling condition	ons a respirator is not req	uired.
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				
Engineering measures	easures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.			
Exposure limit(s)				
Components	Value	Exposure time	Exposure type	List:
Components Titanium dioxide	Value 10 mg/m3	Exposure time Time Weighted Average (TWA):	Exposure type Total dust.	List: ACGIH
		Time Weighted Average		
	10 mg/m3 15 mg/m3	Time Weighted Average (TWA):	Total dust. Total dust.	ACGIH
Titanium dioxide	10 mg/m3 15 mg/m3 9. PHYSIC	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR	Total dust. Total dust. OPERTIES	ACGIH OSHA Z1
Titanium dioxide	10 mg/m3 15 mg/m3 9. PHYSIC : liquid	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapo	Total dust. Total dust. OPERTIES oration rate : Not	ACGIH OSHA Z1
Titanium dioxide Form Appearance	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not	ACGIH OSHA Z1
Titanium dioxide	10 mg/m3 15 mg/m3 9. PHYSIC : liquid	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not	ACGIH OSHA Z1
Titanium dioxide Form Appearance Color	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not	ACGIH OSHA Z1 determined determined applicable.
Titanium dioxide Form Appearance Color Odor	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not r density : Not r density : Not	ACGIH OSHA Z1 determined determined applicable. determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evap- bus, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not r density : Not r density : Not	ACGIH OSHA Z1 determined applicable. determined determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a : Not a : immi	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evap- bus, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not consity : Not r density : Not	ACGIH OSHA Z1 determined applicable. determined determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point:	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a : immi 10. S	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH iscible	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not consity : Not r density : Not	ACGIH OSHA Z1 determined applicable. determined determined
Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point: Water solubility	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a : Not a : immi 10. S	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH iscible	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not consity : Not r density : Not	ACGIH OSHA Z1 determined applicable. determined determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point: Water solubility Stability	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a : Not a : immi 10. S n : W	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH iscible STABILITY AND REACTI table.	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not c density : Not vir density : Not VITY	ACGIH OSHA Z1 determined applicable. determined determined
Titanium dioxide Titanium dioxide Form Appearance Color Odor Melting point/range Boiling Point: Water solubility Stability Hazardous Polymerizatio	10 mg/m3 15 mg/m3 9. PHYSIC : liquid : visco : BLU : Very : Not a : Not a : immi 10. S n : W : K	Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PR d Evapous, liquid Speci E Bulk faint Vapo applicable Vapo applicable pH iscible STABILITY AND REACTI table.	Total dust. Total dust. OPERTIES oration rate : Not fic Gravity : Not density : Not r pressure : Not consity : Not virty : Not	ACGIH OSHA Z1 determined applicable. determined determined



MATERIAL SAFETY DATA SHEET

SAPPHIRE BLUE

Version Number 1.0

Revision Date 01/15/2002

Page 4 of 5 Print Date 11/3/2011

products

(NOx), other hazardous materials, and smoke are all possible.

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.

<u>Toxicity Overview</u> 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.

	12. ECOLOGICAL INFORMATION			
Persistence and degradability	: Not readily biodegradable.			
Environmental Toxicity	: Adverse ecological impact is not known or expected under normal use.			
Bioaccumulation Potential	: Does not bioaccumulate			
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 material 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. D.O.T. / CA T.D.G. Classification (Non-bulk ground)	: Not regulated for transportation.			
ICAO/IATA	: Not regulated for transportation.			
IMO / IMDG	: Not regulated for transportation.			
15. REGULATORY INFORMATION				
US Regulations:				
OSHA Status	: Classified as hazardous based on components.			



MATERIAL SAFETY DATA SHEET

SAPPHIRE BLUE

Version Number 1.0 Revision Date 01/15/2002		Page 5 of 5 Print Date <i>11/3/2011</i>
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
WHMIS Ingredient Disclo	su	re List
CAS-No. 103-23-1		
DSL	:	Listed.
National Inventories:		
Australia AICS	:	Listed.
China IECS	:	Listed.
Europe EINECS	:	Listed.
Japan ENCS	:	Not determined.
Korea KECI	:	Not determined.
Philippines PICCS	:	Listed.

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.