MATERIAL SAFETY DATA SHEET 447 TAUPE TT853U

Version Number 1.0 Revision Date 09/27/2013

Product Use

Page 1 of 8 Print Date 9/27/2013

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	447 TAUPE TT853U
Product code	:	CC10188092
Chemical Name	:	Mixture
CAS-No.	•	Mixture

: Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	1 - 5
Iron oxide	1309-37-1	1 - 5
Silica, amorphous	7631-86-9	1 - 5
Rutile, antimony chromium buff	68186-90-3	5 - 10
Titanium dioxide	13463-67-7	10 - 30

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	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.

PolyOne.

MATERIAL SAFETY DATA SHEET **447 TAUPE TT853U**

Version Number 1.0 Revision Date 09/27/2013 Page 2 of 8 Print Date 9/27/2013

Chronic exposure	: Refer to Section 11 for Toxicological Information.
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, 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 seek medical attention.
	5. FIREFIGHTING MEASURES
Flash point	5. FIREFIGHTING MEASURES : not applicable
Flash point Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature	 not applicable not applicable not applicable not applicable 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
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion	 not applicable not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable not applicable not applicable 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. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable not applicable 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. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable not applicable 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. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. 6. ACCIDENTAL RELEASE MEASURES Wear appropriate personal protection during cleanup, such as

PolyOne.

MATERIAL SAFETY DATA SHEET **447 TAUPE TT853U**

Version Number 1.0 Revision Date 09/27/2013 Page 3 of 8 Print Date 9/27/2013

	7. HAND	LING AND STORAGE
Handling		asures to prevent the build up of electrostatic charge. Heat reas with appropriate exhaust ventilation.
Storage	: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.	
8. EX	DSURE CONT	ROLS/PERSONAL PROTECTION
Respiratory protection	: No perso	nal respiratory protective equipment normally required.
Eye/Face Protection	: Safety gla	asses with side-shields
Hand protection	: Protective	e gloves
Skin and body protection	: Long slee	eved clothing
Additional Protective Measures	: Safety sh	oes
General Hygiene Considerations		a accordance with good industrial hygiene and safety Wash hands before breaks and at the end of workday.
Engineering measures		v in areas with appropriate exhaust ventilation. Provide the exhaust ventilation at machinery.
Exposure limit(s)		

PolyOne.

MATERIAL SAFETY DATA SHEET **447 TAUPE TT853U**

Version Number 1.0 Revision Date 09/27/2013 Page 4 of 8 Print Date 9/27/2013

Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Iron oxide	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Silica, amorphous	6 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL
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):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL



MATERIAL SAFETY DATA SHEET 447 TAUPE TT853U

Version Number 1.0 Revision Date 09/27/2013

Page 5 of 8 Print Date 9/27/2013

	20 mg/m3	Short Term Exposu (STEL):	re Limit	as Ti	MX OEL
	9. PHYSIC	CAL AND CHEMIC	CAL PROPER	TIES	
Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility		ts faint determined pplicable	Evapouration Specific Grav Bulk density Vapour press Vapour dens pH	vity : sure :	not applicable
	10. 5	STABILITY AND R	EACTIVITY		
Stability	: T	he product is stable i	f stored and han	dled as pres	cribed.
Hazardous Polymerization	n : W	/ill not occur.			
Conditions to avoid		eep away from oxidi ecomposition, do not		open flame.	. To avoid thermal
Incompatible Materials	: In	acompatible with stro	ong acids and ox	idizing agen	nts.
Hazardous decomposition products		arbon dioxide (CO2) NOx), other hazardou			

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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
7631-86-9	Silica, amorphous	Irritant	Eyes, Respiratory system.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

LC50 / LD50

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

CAS-No.	Chemical Name	Route	Value	Species
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

MATERIAL SAFETY DATA SHEET 447 TAUPE TT853U

Version Number 1.0 Revision Date 09/27/2013 Page 6 of 8 Print Date 9/27/2013

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.

Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

12. ECOLOGICAL INFORMATION

Persistence and degradability	: Not readily biodegradable.	
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.	
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the polymer matrix.	
Additional advice	: no data available	
	13. DISPOSAL CONSIDERATIONS	
Product	: Like most thermoplastic plastics the product can be recycled. Whe 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.	re
	: Recycling is preferred when possible. The generator of waste	

MATERIAL SAFETY DATA SHEET 447 TAUPE TT853U

Version Number 1.0 Revision Date 09/27/2013 Page 7 of 8 Print Date 9/27/2013

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. DOT Classification Not regulated for transportation. : ICAO/IATA 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 California Proposition : Not applicable 65 SARA Title III Section 302 Extremely Hazardous Substance Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation SARA Title III Section 313 Toxic Chemicals: Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation Chemical Name CAS-No. Weight percent CHROMIUM III COMPOUNDSCHROMIUM III 68186-90-3 5.00 - 10.00 COMPOUNDSANTIMONY COMPOUNDSCHROMIUM COMPOUNDS Canadian Regulations:

National Pollutant Release Inventory (NPRI)

PolyOne.

MATERIAL SAFETY DATA SHEET 447 TAUPE TT853U

Version Number 1.0 Revision Date 09/27/2013

Page 8 of 8 Print Date 9/27/2013

Chemical Name			CAS-No.	Weight	NPRI ID#
-				percent	
Rutile, antimony chromium	buff		68186-90-3	5.00 - 10.00	
WHMIS Classification WHMIS Ingredient Dis CAS-No. 1333-86-4 1309-37-1					
68186-90-3 7631-86-9 DSL	:		ents of this product a List (DSL) or are exe		n Domestic
ational Inventories:					
Australia AICS	:	Listed			
China IECS	:	Listed			
Europe EINECS	:	Listed			
Japan ENCS	:	Listed			
Korea KECI	:	Listed			
Philippines PICCS	:	Listed			

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.