MATERIAL SAFETY DATA SHEET 46541 WT LASER TPU MASTERBATCH

Version Number 1.0 Revision Date 04/18/2005

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone:Emergency telephone:number	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name :	46541 WT LASER TPU MASTERBATCH
Product code :	CC10046541
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	5 - 10
Antimony trioxide	1309-64-4	60 - 100

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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: 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 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 seel medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
	 Not applicable Not applicable Not applicable Carbon dioxide blanket, water spray, dry powder, foamnone. 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.
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.
Storage	: Keep containers dry and tightly closed to avoid moisture absorption

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8. H	XPOSURE	CONTROLS / PERSONAL	PROTECTION	
Respiratory protection	: N	o personal respiratory protecti	ive equipment normally	required.
Eye/Face Protection	: S	afety glasses with side-shields		
Hand protection	: P	rotective gloves.		
Skin and body protection	: L	ong sleeved clothing.		
Additional Protective Measures	: S	afety shoes.		
General Hygiene Considerations		andle in accordance with good ash hands before breaks and a		afety practice
Engineering measures		eat only in areas with appropr ppropriate exhaust ventilation		Provide
Exposure limit(s)				
Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	9. PHYSIC	CAL AND CHEMICAL PRO	DPERTIES	
Form	: Solid	Fyano	ration rate : Not	applicable
Appearance	: Pelle			determined
		PIGMENT Bulk d		established
Color	: Very		•	applicable
Color Odor	NT /	letermined Vapou	r density : Not	applicable
	$:$ Not α	vapou		applicable
Odor	: Not a	applicable pH	: Not	TT
Odor Melting point/range		applicable pH	: Not	TT
Odor Melting point/range Boiling Point:	: Not a : Insol	applicable pH		
Odor Melting point/range Boiling Point:	: Not a : Insol 10. S	applicable pH uble		
Odor Melting point/range Boiling Point: Water solubility	: Not a : Insol 10. S : S	applicable pH uble		

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Incompatible Materials	:	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (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.

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.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.

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
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
1309-64-4	Antimony trioxide	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:

Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

12. ECOLOGICAL INFORMATION

Persistence and degradability

: Not readily biodegradable.



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Bioaccumulation Potential : Chemicals are not readily available as they are bound within a polymer matrix. Additional advice : No data available Image: Construct and the product of the prosible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper veclassification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/provincial and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302) : All components of this product are listed on or exempt from the Inventory.		: Chemicals are not readily available as they are bound within the polymer matrix.				
13. DISPOSAL CONSIDERATIONS Product : Like most thermoplastic plastics the product can be recycled. possible recycling is preferred to disposal or incineration. Th generator of waste material has the responsibility for proper v 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 has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/prov and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste has the responsibility for proper waste classification, transport and disposal in accordance with applicable federal, state/prov and local regulations. U.S. DOT Classification : Not regulated for transportation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from th Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)	ioaccumulation Potential			able as they are bound within the		
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ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. IS. 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 th Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)		N	1.4.16			
IMO / IMDG (maritime) : Refer to specific regulation. IS. 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 th Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)				1.		
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US Regulations: OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from th Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)	MO / IMDG (maritime)	: Refer	to specific regulation.			
OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from th Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)		15. REGU	ULATORY INFORMA	TION		
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Inventory. US. EPA CERCLA Hazardous Substances (40 CFR 302)	OSHA Status	: Classi	fied as hazardous based of	on components.		
	TSCA Status			t are listed on or exempt from the TSCA		
	S. EPA CERCLA Hazardo	us Substances	(40 CFR 302)			
Chemical Name CAS-No. RQ for component RQ for Mixture/Product	Chemical Name	CAS-No.	RQ for component	RQ for Mixture/Product		
Antimony trioxide 1309-64-4 1,000 lbs 1,598 LB	Antimony trioxide	1309-64-4	1,000 lbs			

California Proposition : WARNING! This product contains a chemical known to the State of California to cause cancer.

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SARA Title III Section 302 Extremely Hazardous Substance Not applicable

SARA Title III Section 313 Toxic Chemicals:

Chemical Name	CAS-No.	Weight %
ANTIMONY COMPOUNDS	1309-64-4	62.56

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Antimony trioxide	1309-64-4	62.56	17

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

ĺ	CAS-No.
	1309-64-4

DSL

DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

Australia AICS	: Not determined
China IECS	: Not determined
Europe EINECS	: Listed
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 when used in combination with any other materials and/or in any particular process or processing conditions.