

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****30484 YE LASER TPU SMARTBATCH**Version Number 1.0
Revision Date 11/05/2007Page 1 of 8
Print Date 12/2/2011**1. PRODUCT AND COMPANY IDENTIFICATION****POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012Telephone : Product Stewardship (770) 271-5902
Emergency telephone : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**Product name : 30484 YE LASER TPU SMARTBATCH
Product code : CC10030484
Chemical Name : Mixture
CAS-No. : Mixture
Product Use : Industrial Applications**2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS**

Components	CAS-No.	Weight %
Arsenic	7440-38-2	0.1 - 1
Lead	7439-92-1	0.1 - 1
Titanium dioxide	13463-67-7	5 - 10
Antimony trioxide	1309-64-4	30 - 60

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.
Skin : Experience shows no unusual dermatitis hazard from routine handling.**Chronic exposure** : Refer to Section 11 for Toxicological Information.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 2 of 8
Print Date 12/2/2011

Medical Conditions : None known.
Aggravated by Exposure:

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 seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point : Not applicable

Flammable Limits
Upper explosion limit : Not applicable
Lower explosion limit : Not applicable

Autoignition temperature : Not applicable

Suitable extinguishing media : Carbon dioxide blanket, Water spray, Dry powder, Foam.

Special Fire Fighting Procedures : Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.

Unusual Fire/Explosion Hazards : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), other hazardous materials, and smoke are all possible.

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 sweeping 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

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 3 of 8
Print Date 12/2/2011

only in areas with appropriate exhaust ventilation.

Storage : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection : No personal respiratory protective equipment normally required.

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 : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

Exposure limit(s)

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 4 of 8
Print Date 12/2/2011

Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
Arsenic	0.01 mg/m3	Time Weighted Average (TWA):	as As	ACGIH
	0.01 mg/m3	Time Weighted Average (TWA):		OSHA
	0.005 mg/m3	OSHA Action level:		OSHA
Lead	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):		OSHA
	0.03 mg/m3	OSHA Action level:		OSHA
	0.15 mg/m3	Time Weighted Average (TWA):	Dust and fume. as Pb	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):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Solid	Evaporation rate	: Not applicable
Appearance	: pellets	Specific Gravity	: Not determined
Color	: YELLOW	Bulk density	: Not established
Odour	: Very faint	Vapour pressure	: Not applicable
Melting point/range	: Not determined	Vapour density	: Not applicable
Boiling Point:	: Not applicable	pH	: Not applicable
Water solubility	: Insoluble		

10. STABILITY AND REACTIVITY

Stability	: Stable.
Hazardous Polymerization	: Will not occur.
Conditions to avoid	: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	: Incompatible with strong acids and oxidizing agents.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 5 of 8
Print Date 12/2/2011

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), 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
7440-38-2	Arsenic	Systemic effects	Skin, Respiratory system, Liver, Kidney, heart or circulatory system.
7439-92-1	Lead	Systemic effects	blood and blood forming system, Kidney, central nervous system (CNS), reproductive system, digestive system.
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
7440-38-2	Arsenic	Oral LD50	763 mg/kg	rat
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
7440-38-2	Arsenic	yes	1	no
7439-92-1	Lead	yes	2B	no
13463-67-7	Titanium dioxide	no	2B	no
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.

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 6 of 8
Print Date 12/2/2011

Additional Health Hazard Information:

Arsenic 7440-38-2 Trivalent compounds are corrosive to skin. Acute effects are due to severe inflammation of mucous membrane while chronic effects include peripheral neuritis, perforation for the nasal septum and mild tracheobronchitis.

Additional Health Hazard Information:

Lead 7439-92-1 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

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.
- 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. 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. DOT Classification : Not regulated for transportation.
- ICAO/IATA (air) : Refer to specific regulation.
- IMO / IMDG (maritime) : Refer to specific regulation.

15. REGULATORY INFORMATION

POLYONE CORPORATION**MATERIAL SAFETY DATA SHEET****30484 YE LASER TPU SMARTBATCH**Version Number 1.0
Revision Date 11/05/2007Page 7 of 8
Print Date 12/2/2011

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)

Chemical Name	CAS-No.	RQ for component	RQ for Mixture/Product
Arsenic	7440-38-2	001 lbs	556 LB

California Proposition 65 : WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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 %
ANTIMONY COMPOUNDS	1309-64-4	30.00 - 60.00
ARSENIC	7440-38-2	0.10 - 1.00
LEAD	7439-92-1	0.10 - 1.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Antimony trioxide	1309-64-4	30.00 - 60.00	17
Arsenic	7440-38-2	0.10 - 1.00	234
Lead	7439-92-1	0.10 - 1.00	236

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

POLYONE CORPORATION

MATERIAL SAFETY DATA SHEET

30484 YE LASER TPU SMARTBATCH

Version Number 1.0
Revision Date 11/05/2007

Page 8 of 8
Print Date 12/2/2011

CAS-No.
1309-64-4
7440-38-2
7439-92-1

DSL : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

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 used in combination with any other materials or in any process, unless specified in the text.