152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 1 of 15 Print Date 12/18/2021

SAFETY DATA SHEET

152067 BL TPU MASTERBATCH

Section 1. Identification	n	
GHS product identifier	:	152067 BL TPU MASTERBATCH
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10152067
Product type	:	solid
J		
Relevant identified uses of the subst	ance	or mixture and uses advised against
Product use	:	Industrial applications.
Supplier's details	:	AVIENT CORPORATION
••		33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (844) 4AVIENT
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

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. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
GHS label elements		
Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 2 of 15 Print Date 12/18/2021

Precautionary statements

	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10152067

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	>= 5 - <= 10	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated
	2/15

Ingestion

SAFETY DATA SHEET

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 3 of 15

Print Date 12/18/2021

clothing and shoes. Get medical attention if symptoms occur.
Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects Eye contact No known significant effects or critical hazards. : Inhalation No known significant effects or critical hazards. : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Ingestion • **Over-exposure signs/symptoms** Eye contact No specific data. : No specific data. Inhalation : Skin contact No specific data. : Ingestion No specific data. •

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 . None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal	:	Decomposition products may include the following materials:

152067 BL TPU MASTERBATCH



Version Number 1.5 Revision Date 12/16/2021

Page 4 of 15 Print Date 12/18/2021

decomposition products		carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containme	nt a	nd cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

:

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8).

152067 BL TPU MASTERBATCH



Version Number 1.5 Revision Date 12/16/2021

Page 5 of 15 Print Date 12/18/2021

Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TWA 10 mg/m3	

Appropriate engineering controls Environmental exposure controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety
		5/15

152067 BL TPU MASTERBATCH



Version Number 1.5 Revision Date 12/16/2021

Page 6 of 15 Print Date 12/18/2021

Eye/face protection	 showers are close to the workstation location. Safety eyewear complying with an approved standard sho when a risk assessment indicates this is necessary to avoid liquid splashes, mists, gases or dusts. If contact is possible following protection should be worn, unless the assessment higher degree of protection: safety glasses with side-shield 	l exposure to e, the nt indicates a
Skin protection		
Hand protection	: Chemical-resistant, impervious gloves complying with an standard should be worn at all times when handling chemi if a risk assessment indicates this is necessary.	
Body protection	: Personal protective equipment for the body should be sele on the task being performed and the risks involved and sh approved by a specialist before handling this product.	
Other skin protection	: Appropriate footwear and any additional skin protection n should be selected based on the task being performed and involved and should be approved by a specialist before ha product.	the risks
Respiratory protection	: Based on the hazard and potential for exposure, select a remeets the appropriate standard or certification. Respirators used according to a respiratory protection program to ensufitting, training, and other important aspects of use.	s must be

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	BLUE
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 7 of 15 Print Date 12/18/2021

Solubility in water	:	insoluble in water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
		Kinematic: Not available.
Aerosol product		
Heat of combustion	:	Not available.
Ignition distance	:	Not available.
Enclosed space ignition - Time equivalent	:	Not available.
Enclosed space ignition -	:	Not available.
Deflagration density		
Flame height	:	Not available.
Flame duration	:	Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Titanium oxide (TiO2)				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	Dusts and mists		_	
	Dusts and mists			

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021

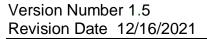
Page 8 of 15

Print Date 12/18/2021

	LD50 Der	mal	Rabbit		> 5,000 mg/kg	-	
Conclusion/Summary	:	Mixtur	e.Not fully t	ested.			
Irritation/Corrosion							
Conclusion/Summary Skin Eyes Respiratory	:	Mixtu	re.Not fully re.Not fully re.Not fully	ested.			
<u>Sensitization</u>							
Conclusion/Summary Skin Respiratory	:		re.Not fully re.Not fully				
<u>Mutagenicity</u>							
Conclusion/Summary	:	Mixtu	re.Not fully	ested.			
Carcinogenicity							
Conclusion/Summary	:	Mixtu	re.Not fully	ested.			
Classification							
Product/ingredient name	OSHA	IA	RC	NTP			
Titanium oxide (TiO2)	-	2E	3	-			
Reproductive toxicity							
Conclusion/Summary	:	Mixtu	re.Not fully	ested.			
Teratogenicity							
Conclusion/Summary	:	Mixtu	re.Not fully	ested.			
Specific target organ toxicity Not available.	(single expo	<u>sure)</u>					
Specific target organ toxicity Not available.	(repeated e	xposure	<u>e)</u>				
Aspiration hazard Not available.							
			8/15				



152067 BL TPU MASTERBATCH





Page 9 of 15

Print Date 12/18/2021

Information on the likely routes of Not available. exposure Potential acute health effects Eye contact No known significant effects or critical hazards. : Inhalation No known significant effects or critical hazards. : Skin contact No known significant effects or critical hazards. : No known significant effects or critical hazards. Ingestion : Symptoms related to the physical, chemical and toxicological characteristics **Eve contact** No specific data. : Inhalation No specific data. : No specific data. Skin contact : Ingestion No specific data. • Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure **Potential immediate effects** Not available. : **Potential delayed effects** Not available. Long term exposure Potential immediate effects Not available. : **Potential delayed effects** Not available. • Potential chronic health effects **Conclusion/Summary** Mixture.Not fully tested. : General No known significant effects or critical hazards. : Carcinogenicity No known significant effects or critical hazards. : No known significant effects or critical hazards. Mutagenicity : Teratogenicity No known significant effects or critical hazards. : **Developmental effects** No known significant effects or critical hazards. : **Fertility effects** No known significant effects or critical hazards. :

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and



152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021

Page 10 of 15 Print Date 12/18/2021

					mists)
152067 BL TPU MASTERBATCH	N/A	N/A	N/A	N/A	6.82 Mg/l
Titanium oxide (TiO2)	N/A	N/A	N/A	N/A	6.82 Mg/l

Other 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.

Section 12. Ecological information

:

Toxicity

Result	Species	Exposure
•	· -	•
Acute LC50 > 1,000 Mg/l	Fish - Fundulus heteroclitus	96 h
Marine water		
Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia	48 h
	dubia	
Acute LC50 6.5 Mg/l Fresh	Daphnia - Daphnia pulex	48 h
water		
ГСН		
Chemicals are not readily available	e as they are bound within the po	lymer matrix.
polymer matrix.	ily available as they are bound wi	thin the
: Chemicals are not read polymer matrix.	dily available as they are bound w	ithin the
: Chemicals are not read polymer matrix.	dily available as they are bound w	vithin the
	Acute LC50 > 1,000 Mg/l Marine water Acute LC50 3 Mg/l Fresh water Acute LC50 6.5 Mg/l Fresh water ICH Chemicals are not readily available : Chemicals are not readily available	Acute LC50 > 1,000 Mg/l Fish - Fundulus heteroclitus Marine water Crustaceans - Ceriodaphnia Acute LC50 3 Mg/l Fresh water Crustaceans - Ceriodaphnia Acute LC50 6.5 Mg/l Fresh Daphnia - Daphnia pulex water Daphnia - Daphnia pulex ICH Chemicals are not readily available as they are bound within the po : Chemicals are not readily available as they are bound within the polymer matrix. : Chemicals are not readily available as they are bound within the polymer matrix.

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 11 of 15 Print Date 12/18/2021

Mobility in soil

Soil/water partition coefficient : Not available. (KOC)

:

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	:	Not classified as dangerous goods under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: None of the components are listed.

11/15

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 12 of 15 Print Date 12/18/2021

United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Listed 1.1'-**Biphenyl**, chloro derivs. United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Phthalocyanine Blue 1,1'-Biphenyl, chloro derivs. Benzene, 1,2,3,4,5,6-hexachloro-United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed Listed Not listed Not listed

Clean Air Act Section 112(b)
Hazardous Air Pollutants (HAPs)
Clean Air Act Section 602 Class I
Substances
Clean Air Act Section 602 Class II
Substances
DEA List I Chemicals (Precursor
Chemicals)
DEA List II Chemicals (Essential
Chemicals)

:

•

•

Not listed

Not listed

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 13 of 15 Print Date 12/18/2021

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

No products were found.

Name	%	Classification
Titanium oxide (TiO2)	>= 5 - <= 10	CARCINOGENICITY - Category 2

Form R - Reporting requirements

Product name	CAS number	%
1,1'-Biphenyl, chloro derivs.	-	> 0 - <= 0.1
Benzene, 1,2,3,4,5,6-hexachloro-	118-74-1	> 0 - <= 0.1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Not applicable.

State regulations	
Massachusetts	: None of the components are listed.
New York	: None of the components are listed.
New Jersey	: The following components are listed:
	Phthalocyanine Blue Titanium dioxide
Pennsylvania	: The following components are listed: Phthalocyanine Blue
	Titanium dioxide

California Prop. 65

WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

dosage level	Ingredient name	No significant risk level	Maximum acceptable dosage level
--------------	-----------------	---------------------------	------------------------------------

152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021 Page 14 of 15 Print Date 12/18/2021

Titanium dioxide		-	-
United States inventory (TSCA 8b)		All components are active or exempted.	
		······································	
Canada inventory	:	All components are listed or exempted.	
International regulations			
Inventory list			
Australia	:	All components are listed or exempted.	
Canada	:	All components are listed or exempted.	
China	:	All components are listed or exempted.	
Europe inventory	:	All components are listed or exempted.	
Japan	:	Not determined.	
New Zealand	:	Not determined.	
Philippines	:	All components are listed or exempted.	
Republic of Korea	:	Not determined.	
Taiwan	:	All components are listed or exempted.	
Turkey	:	Not determined.	
United States	:	All components are active or exempted.	

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

Key to abbreviations	:	ATE = Acute Toxicity Estimate
Version	:	1.5
Date of previous issue	:	04/27/2015
Date of issue/Date of revision	:	12/16/2021
Date of printing	:	12/18/2021
<u>Illstol y</u>		



152067 BL TPU MASTERBATCH

Version Number 1.5 Revision Date 12/16/2021



Page 15 of 15 Print Date 12/18/2021

BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations Not available.

References

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.