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SAFETY DATA SHEET

BISCUIT PBT 966296

Section 1. Identification		
GHS product identifier	:	BISCUIT PBT 966296
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10167779
Product type	:	solid
Relevant identified uses of the subs	stance	or mixture and uses advised against
Product use	:	Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION
		33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
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.
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Hazard statements

No known significant effects or critical hazards.

Precautionary statements

General	:	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.

Section 3. Composition/information on ingredients

:

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10167779

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	30 - 60	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



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	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
	clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: 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 Inhalation Skin contact Ingestion	::	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical att	entio	n 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. Firefighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or CO₂.

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Unsuitable extinguishing media	:	None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: 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 For emergency responders	:	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. 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 ai	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.



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Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). 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)
	PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust
	NIOSH REL (1994-06-01)
	ACGIH TLV (1996-05-18)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3
	remissible Exposure Level to hig/his
Appropriate engineering controls	Coord general ventilation should be sufficient to control worker
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	: 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

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

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	TAN
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.

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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.
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.

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

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.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure



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Titanium dioxide				
Remarks - Oral:	No applicable toxic	city data		
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		

Conclusion/Summary

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				
Conclusion/Summary					
Skin		lixture.Not fu			
Eyes		lixture.Not fu			
Respiratory	: N	lixture.Not fu	Illy tested.		
Sensitization					
Conclusion/Summary					
Skin		lixture.Not fu			
Respiratory	: N	lixture.Not fu	Illy tested.		
<u>Mutagenicity</u>					
Conclusion/Summary	: N	lixture.Not fu	Illy tested.		
Carcinogenicity					
Conclusion/Summary Classification	: N	lixture.Not fu	Illy tested.		
Product/ingredient name	OSHA	IARC	NTP		
Titanium dioxide		2B			
<u>Reproductive toxicity</u>					
Conclusion/Summary	: N	lixture.Not fu	ally tested.		
Teratogenicity					
Conclusion/Summary	: N	lixture.Not fu	ally tested.		
Specific target organ toxici Not available.	ty (single exposi	<u>ıre)</u>			



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<u>Specific target organ toxicity (rep</u> Not available.	eated e	exposure)
Aspiration hazard Not available.		
Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact Inhalation Skin contact Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical,	chemi	cal and toxicological characteristics
Eye contact Inhalation Skin contact Ingestion	::	No specific data. No specific data. No specific data. No specific data.
Delayed and immediate effects as	well as	chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Detential abustic health offersta		
Potential chronic health effects		
<u>Potential chronic health effects</u> Conclusion/Summary	:	Mixture.Not fully tested.
	: : : : : : : : : : : : : : : : : : : :	Mixture.Not fully tested. No known significant effects or critical hazards. No known significant effects or critical hazards.

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Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result		Species	Exposure			
Titanium dioxide							
	Acute LC50) > 1,000 Mg/l Marine	Fish - Fish	96 h			
	water						
Remarks - Acute - Fish:	Acute	Acute					
	Acute LC50) 3 Mg/l Fresh water	Aquatic invertebrates.	48 h			
			Crustaceans				
Remarks - Acute - Aquatic	Acute						
invertebrates.:			T	1			
	Acute LC50	0 6.5 Mg/l Fresh water	Aquatic invertebrates.	48 h			
			Daphnia				
Remarks - Acute - Aquatic	Acute	scute					
invertebrates.:							
Remarks - Acute - Aquatic	No applicat	No applicable toxicity data					
plants:		x 1' 11 / ''' 1 /					
Remarks - Chronic - Fish:	**	No applicable toxicity data					
Remarks - Chronic -	No applicat	ble toxicity data					
Aquatic invertebrates.:							
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Remarks - Acute - Aquatic	Chemicals a	Chemicals are not readily available as they are bound within the polymer matrix.					
invertebrates.:		<u>Cl. 1 1 11</u>	1 111 1 1	1 . 4 . 4			
Conclusion/Summary	:	polymer matrix.	ly available as they are bou	nd within the			
Persistence and degradability	<u>v</u>						
Conclusion/Summary	:	Chemicals are not readily polymer matrix.	ly available as they are bou	nd within the			
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.						
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Bioaccumulative potential
Not available. Image: Mobility in soil Mobility in soil Image: Mot available. Soil/water partition coefficient
(KOC) Image: Mot available. Other adverse effects Image: Mot available. Image: Not available. Image: Mot available. Image: Not available.

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.

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Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: None of the components are listed. 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 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: 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: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I Substances	:	Not listed
Clean Air Act Section 602 Class II Substances	:	Not listed
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
DEA List II Chemicals (Essential	:	Not listed

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Chemicals)

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

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Classification

: Not applicable.

Composition/information on ingredients

Name	%	Classification
Titanium dioxide	30 - 60	СН

SARA 313 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:		
		Titanium dioxide		
Pennsylvania	:	The following components are listed:		
		Aluminum hydroxide		
		Silica, amorphous		
		Titanium dioxide		
California Prop. 65 WARNING: This product contains a chemical known to the State of California to cause cancer.				
United States inventory (TSCA 8b)	:	All components are listed or exempted.		
Canada inventory	:	All components are listed or exempted.		
International regulations				
Inventory list				
Australia	:	Not determined.		
Canada	:	All components are listed or exempted.		
China	:	Not determined.		
Europe inventory	:	All components are listed or exempted.		
Japan	:	All components are listed or exempted.		
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New Zealand Philippines Republic of Korea Taiwan Turkey United States	:	Not determined. Not determined. All components are listed or exempted. All components are listed or exempted. Not determined. All components are listed or exempted.
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Section 16. Other information

History		
Date of printing	:	11/20/2018
Date of issue/Date of revision	:	05/03/2018
Date of previous issue	:	11/02/2012
Version	:	1.4
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = 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
References	:	Not available.

Notice to reader

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