ne

Version Number 1.0 Revision Date 11/17/2014 Page 1 of 14 Print Date 11/18/2014

SAFETY DATA SHEET

Trilliant 118095#SR-08542-1 White

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification	:	Trilliant 118095#SR-08542-1 White Mixture Mixture EM10034245
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	tance	or mixture and uses advised against 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). 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 MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
Supplemental label elements	:	None known.

1/14

Version Number 1.0 Revision Date 11/17/2014 Page 2 of 14 Print Date 11/18/2014

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	EM10034245

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	0.1 - 1	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.
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

<u>vOne</u>

Version Number 1.0 Revision Date 11/17/2014

Page 3 of 14 Print Date 11/18/2014

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 atte	<u>entio</u>	on and special treatment needed, if necessary

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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 $\rm CO_2$. None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	No specific data.
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.

P<u>olyOne</u>

Version Number 1.0 Revision Date 11/17/2014

Page 4 of 14 Print Date 11/18/2014

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 specialised 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 containment and 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

ner. Dispose of via a
entry into sewers, water
uum or sweep up material
ontainer. Dispose of via a
ee Section 1 for emergency
ste disposal.

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

olyOne.

Version Number 1.0 Revision Date 11/17/2014 Page 5 of 14 Print Date 11/18/2014

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
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 necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures Eye/face protection	:	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. 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
Skin protection		higher degree of protection: safety glasses with side-shields.

<u>PolyOne</u>.

Version Number 1.0	Page 6 of 14
Revision Date 11/17/2014	Print Date 11/18/2014

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	: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	WHITE
Odor	:	Faint odor.
Odor threshold	:	Not available.
pH	:	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.
Solubility in water	:	insoluble in water.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.

)ne

Version Number 1.0 Revision Date 11/17/2014

Page 7 of 14 Print Date 11/18/2014

SADT	: Not available.	
Viscosity	: Dynamic: Not available.	
-	Kinematic: Not available	e.

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	
Conclusion/Summary	: Mixture.Not fully tested.
Irritation/Corrosion	
Conclusion/Summary Skin Eyes Respiratory	Mixture.Not fully tested.Mixture.Not fully tested.Mixture.Not fully tested.
<u>Sensitization</u> Conclusion/Summary Skin Respiratory <u>Mutagenicity</u>	Mixture.Not fully tested.Mixture.Not fully tested.

<u>lyOne</u>.

Version Number 1.0 Revision Date 11/17/2014

Page 8 of 14 Print Date 11/18/2014

Conclusion/Summary		:	Mixture.No	t fully tested.			
Carcinogenicity							
Conclusion/Summary <u>Classification</u>		:	Mixture.No	t fully tested.			
Product/ingredient name	OSHA			IARC		NTP	
Titanium dioxide				2B			
<u>Reproductive toxicity</u>							
Conclusion/Summary		:	Mixture.No	t fully tested.			
Teratogenicity							
Conclusion/Summary		:	Mixture.No	t fully tested.			
Specific target organ toxicity Not available.	<u>(single e</u>	expo	<u>osure)</u>				
Specific target organ toxicity Not available.	(repeate	ed e	exposure)				
Aspiration hazard Not available.							
Information on the likely rou exposure	tes of	:	Not availab	le.			
Potential acute health effects							
Eye contact Inhalation Skin contact Ingestion		:	No known s No known s	significant effects significant effects significant effects significant effects	s or critical has s or critical has	zards. zards.	
Symptoms related to the phys	sical, che	mic	cal and toxic	ological charact	eristics		
Eye contact		:	No specific	data.			
Inhalation		:	No specific				
Skin contact		:	No specific				
Ingestion		:	No specific	data.			

Delayed and immediate effects and also chronic effects from short and long term exposure

PolyOne

Version Number 1.0 Revision Date 11/17/2014

Page 9 of 14 Print Date 11/18/2014

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
Mutagenicity	:	No known significant effects or critical hazards
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

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 1,000,000 µg/l Marine	Fish - Mummichog	96 h
	water		
	Acute LC50 1,000 mg/l Fresh	Fish - Fathead minnow	96 h
	water		
	Acute LC50 5.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute LC50 10 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h



Version Number 1.0 Revision Date 11/17/2014

Page 10 of 14 Print Date 11/18/2014

		Water flea		
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute EC50 35.9 mg/l Fresh water	Aquatic plants - Green algae	72 h	
	Acute EC50 5.83 mg/l Fresh water	Aquatic plants - Green algae	72 h	
Trilliant 118095#SR-08542-1	White			
Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available a	s they are bound within the	polymer matrix.	
Conclusion/Summary	onclusion/Summary : Chemicals are not readily available as they are bound within the polymer matrix.			
Persistence and degradability	<u>v</u>			
Conclusion/Summary	: Chemicals are not readil polymer matrix.	y available as they are boun	nd within the	

		~
Conclusion/Summary	:	Chemicals are not readily available as they are bound within the
		polymer matrix.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		No known significant offects or ortical begande
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
------------------	---	--

vOne

Version Number 1.0 Revision Date 11/17/2014 Page 11 of 14 Print Date 11/18/2014

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 Classification	:	Not regulated for transportation.
ICAO/IATA	:	Not classified as dangerous good under transport regulations.
IMO/IMDG (maritime)	:	Not classified as dangerous good 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.
		United States - TSCA 4(a) - Final Test Rules: 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: 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) - 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 - TSCA 4(a) - ITC Priority list: Not listed
		United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Ethyl benzene

ne

Version Number 1.0 Revision Date 11/17/2014 Page 12 of 14 Print Date 11/18/2014

Acrylonitrile Methylene chloride

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

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I	:	Not listed
Substances		
Clean Air Act Section 602 Class II	:	Not listed
Substances		
DEA List I Chemicals (Precursor	:	Not listed
Chemicals)		
DEA List II Chemicals (Essential	:	Not listed
Chemicals)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

Composition/information on ingredients

Name	%	Classification
Titanium dioxide	0.1 - 1	СН

	SARA	313	
--	------	-----	--

Not applicable.

<u>State regulations</u> Massachusetts	: None of the components are listed.
New York	None of the components are listed.
New Jersey	The following components are listed:
	White mineral oil
	Titanium dioxide
	10/11

:

<u>PolyOne</u>

Version Number 1.0 Revision Date 11/17/2014

Page 13 of 14 Print Date 11/18/2014

Pennsylvania	:	The following components are listed: Titanium dioxide
<u>California Prop. 65</u> WARNING: This product contains a c	hemi	ical 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		
International lists	:	 Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): Not determined.
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed
Chemical Weapons Convention List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

<u>History</u>		
Date of printing	:	11/18/2014
Date of issue/Date of revision	:	11/17/2014
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate
e e		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL 73/78 = International Convention for the Prevention of Pollution
		13/14

:

Version Number 1.0 Revision Date 11/17/2014

Page 14 of 14 Print Date 11/18/2014

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.