ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015 PolyOne.

Page 1 of 14 Print Date 11/26/2015

SAFETY DATA SHEET

ET3200-0001, Gray UV

Section 1. Identification		
GHS product identifier	:	ET3200-0001, Gray UV
Chemical name		Mixture
CAS number		Mixture
Other means of identification	:	EM10025503
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	stance :	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).

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.
		1/14

ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015

<u>PolyOne</u>

Page 2 of 14 Print Date 11/26/2015

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	:	EM10025503

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.

<u>PolyOne</u>

ET3200-0001, Gray UV

Version Number 1.2	Page 3 of 14
Revision Date 11/25/2015	Print Date 11/26/2015
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, acut	e and delayed
Potential acute health effects	
Eye contact	: No known significant effects or critical hazards.
	: No known significant effects or critical hazards.
	: No known significant effects or critical hazards.
Ingestion	: 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 atten	tion and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.
See torrigological information (Section	11)

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.



ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015		Page 4 of 14 Print Date 11/26/2015
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire- fighters Special protective equipment for	:	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. Fire-fighters should wear appropriate protective equipment and self-
fire-fighters	•	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 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 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).



ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015	Page 5 of 14 Print Date 11/26/2015
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)
		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	:	Wash hands, forearms and face thoroughly after handling chemical
		products, before eating, smoking and using the lavatory and at the end



ET3200-0001, Gray UV

Version Number 1.2	Page 6 of 14
Revision Date 11/25/2015	Print Date 11/26/2015

Eye/face protection	:	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 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	:	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

:	solid [Pellets.]
:	GREY
:	Faint odor.
:	Not available.
:	Lower: Not available.

ne.

ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015 Page 7 of 14 Print Date 11/26/2015

(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
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		

7/14

ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015 <u>PolyOne</u>

Page 8 of 14 Print Date 11/26/2015

Irritation/Corrosion

Conclusion/Summary Skin			Mixture.Not fu		
Eyes Respiratory			Mixture.Not fu Mixture.Not fu		
Sensitization		• •	viixture.i vot iu	ny tested.	
Conclusion/Summary Skin			Mixture.Not fu		
Respiratory		: 1	Mixture.Not fu	ily tested.	
Mutagenicity					
Conclusion/Summary		: 1	Mixture.Not fu	lly tested.	
Carcinogenicity					
Conclusion/Summary <u>Classification</u>		: 1	Mixture.Not fu	lly tested.	
Product/ingredient name	OSHA		IARC	NTP	
Titanium dioxide			2B		
Reproductive toxicity		. 1	Mintume Not for	lly tosted	
Conclusion/Summary		: 1	Mixture.Not fu	ily tested.	
Teratogenicity					
Conclusion/Summary		: 1	Mixture.Not fu	lly tested.	
Specific target organ toxicity Not available.	<u>(single</u>)	expos	<u>ure)</u>		
Specific target organ toxicity Not available.	<u> (repeat</u>	ed ex	<u>posure)</u>		
<u>Aspiration hazard</u> Not available.					
Information on the likely rou exposure	tes of	: 1	Not available.		
Potential acute health effects					
			8/14	1	



ET3200-0001, Gray UV

Version Number 1.2	Page 9 of 14
Revision Date 11/25/2015	Print Date 11/26/2015

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.
Ingestion	:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

Delayed and immediate effects and also chronic effects from short and long 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.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
-		

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015



Page 10 of 14 Print Date 11/26/2015

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 µg/l	Fish - Fish	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh	Fish - Fish	96 h
	water		
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustacean Order	
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustacean Order	10.1
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustacean Order	10.1
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustacean Order	
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustacean Order	
ET3200-0001, Gray UV			
Remarks - Acute - Aquatic	Chemicals are not readily available a	as they are bound within the	e polymer matrix.
invertebrates.:			1
Conclusion/Summary		ly available as they are bou	nd within the
	polymer matrix.		
Dausistance and desus dahilit			
Persistence and degradabilit	<u>v</u>		
Conclusion/Summary	: Chemicals are not readi	ly available as they are bou	nd within the
Conclusion/Summary	polymer matrix.	iy available as uney all bou	
	porymer maura.		
Conclusion/Summary	: Chemicals are not readi	ly available as they are bou	nd within the
Conclusion/Summary	polymer matrix.	iy available as uney are bou	
	porymer maaria.		
Bioaccumulative potential			
Potonial			



ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015

Page 11 of 14 Print Date 11/26/2015

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC) Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

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) - ITC Priority list: Not listed
	United States - TSCA 4(a) - Proposed test rules: Not listed
	11/14

ET3200-0001, Gray UV

Version Number 1.2	Page 12 of 14
Revision Date 11/25/2015	Print Date 11/26/2015

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 - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Methylene chloride United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Not 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 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)	•	i tot listoa

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:



ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015

Composition/information on ingredients

Name	%	Classification
Titanium dioxide	0.1 - 1	СН
SARA 313 Not applicable. State regulations Massachusetts New York New Jersey Pennsylvania California Prop. 65	 None of the components are liste None of the components are liste The following components are li Titanium dioxide The following components are li Titanium dioxide 	d. d. sted:
	chemical known to the State of CalifornAll components are listed or exe	
United States Inventory (ISCA 80)	: All components are listed or exe	mpted.
Canada inventory	: All components are listed or exe	mpted.
International regulations		
International lists	Taiwan inventory (CSNN): Al Malaysia Inventory (EHS Regi EINECS: All components are li Japan inventory: All compone China inventory (IECSC): All Korea inventory: All compone	sted or exempted. nts are listed or exempted. components are listed or exempted. ents are listed or exempted. emicals (NZIoC): All components
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	



ET3200-0001, Gray UV

Version Number 1.2 Revision Date 11/25/2015

Page 14 of 14 Print Date 11/26/2015

Section 16. Other information

<u>History</u>		
Date of printing	:	11/26/2015
Date of issue/Date of revision	:	11/25/2015
Date of previous issue	:	04/27/2015
Version	:	1.2
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 = 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
		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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