ne

Version Number 1.1 Revision Date 05/22/2014 Page 1 of 15 Print Date 05/23/2014

SAFETY DATA SHEET

X GV 96371#SR-05889 Gold

Section 1. Identification	n	
		W GW 62071//0D 65000 G 11
GHS product identifier	:	X GV 96371#SR-05889 Gold
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	EM10032533
Product type	:	solid
Relevant identified uses of the substa	ance	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). 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	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	CARCINOGENICITY - Category 2
Hazard statements	:	Suspected of causing cancer.

Precautionary statements



Version Number 1.1 Revision Date 05/22/2014 Page 2 of 15 Print Date 05/23/2014

General	:	Not applicable.
Prevention	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response	:	IF exposed or concerned: Get medical attention.
Storage	:	Store in a well-ventilated place.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
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	:	EM10032533

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. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained



personnel. It may be dangerous to the person providing aid to give

SAFETY DATA SHEET X GV 96371#SR-05889 Gold

Version Number 1.1	Page 3 of 15
Revision Date 05/22/2014	Print Date 05/23/2014

mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Skin contact Flush contaminated skin with plenty of water. Remove contaminated : clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. Ingestion Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed **Potential acute health effects** No known significant effects or critical hazards. Eye contact : 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 **Eve contact** No specific data. No specific data. Inhalation : Skin contact : No specific data. No specific data. Ingestion • Indication of immediate medical attention 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. It may be dangerous to the person providing aid to
	3/15

vOne.

Version Number 1.1 Revision Date 05/22/2014 Page 4 of 15 Print Date 05/23/2014

give mouth-to-mouth resuscitation.

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	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	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



Version Number 1.1	Page 5 of 15
Revision Date 05/22/2014	Print Date 05/23/2014

Small spill	:	Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, 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). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
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. Store in a well-ventilated place. 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

<u>PolyOne</u>

Version Number 1.1 Revision Date 05/22/2014

Page 6 of 15 Print Date 05/23/2014

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	:	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
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 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. Considering the
		C/4 E

<u>PolyOne</u>

Version Number 1.1	Page 7 of 15
Revision Date 05/22/2014	Print Date 05/23/2014

		parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
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	:	YELLOW
Odor	:	Not available.
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.
Solubility in water	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
		745

)ne

Version Number 1.1 Revision Date 05/22/2014 Page 8 of 15 Print Date 05/23/2014

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.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 <u>Sensitization</u>	 Mixture.Not fully tested. Mixture.Not fully tested. Mixture.Not fully tested. 	
Conclusion/Summary Skin Respiratory	Mixture.Not fully tested.Mixture.Not fully tested.	

<u>PolyOne</u>

Version Number 1.1 Revision Date 05/22/2014 Page 9 of 15 Print Date 05/23/2014

Mutagenicity				
Conclusion/Summary	:	Mixture.Not	t fully tested.	
Carcinogenicity				
Conclusion/Summary <u>Classification</u>	:	Mixture.Not	t fully tested.	
Product/ingredient name	OSHA		IARC	NTP
Titanium dioxide			2B	
<u>Reproductive toxicity</u> Conclusion/Summary	:	Mixture Not	t fully tested.	
Conclusion/Summary	•	WIIXture.100	Turry tested.	
Teratogenicity				
Conclusion/Summary	:	Mixture.Not	t fully tested.	
Specific target organ toxicity Not available.	y (single exp	<u>osure)</u>		
Specific target organ toxicity Not available.	<u>(repeated e</u>	exposure)		
Aspiration hazard Not available.				
Information on the likely rou exposure	tes of :	Not availabl	е.	
Potential acute health effects				
Eye contact Inhalation Skin contact Ingestion	:	No known s No known s	ignificant effects or critical has ignificant effects or critical has ignificant effects or critical has ignificant effects or critical has	zards. zards.
Symptoms related to the phys	sical, chemio	cal and toxico	ological characteristics	
Eye contact	:	No specific	data.	
Inhalation	:	No specific		
Skin contact	:	No specific	data.	
Ingestion	:	No specific data.		

Version Number 1.1 Revision Date 05/22/2014 Page 10 of 15 Print Date 05/23/2014

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

Short term exposure Not available. Potential immediate effects : 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. : No known significant effects or critical hazards. General : Carcinogenicity Suspected of causing cancer. Risk of cancer depends on duration and : level of exposure. 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
X GV 96371#SR-05889 Gold			
Remarks - Acute - Aquatic	Chemicals are not readily availabl	e as they are bound with	in the polymer matrix.
invertebrates.:			
Conclusion/Summary	: Chemicals are not rea	dily available as they ar	e bound within the
	polymer matrix.		

Persistence and degradability

Version Number 1.1 Revision Date 05/22/2014 Page 11 of 15 Print Date 05/23/2014

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

<u>Mobility in soil</u>

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

ICAO/IATA	:	Consult mode specific transport rules
U.S. DOT Classification	:	Not regulated for transportation.

11/15

1e

SAFETY DATA SHEET X GV 96371#SR-05889 Gold

Version Number 1.1 Revision Date 05/22/2014

Page 12 of 15 Print Date 05/23/2014

IMO/IMDG (maritime) : Consult mode specific transport rules : Transport within user's premises: always transport in closed Special precautions for user containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.'

Section 15. Regulatory information

U.S. Federal regulations	: United States - TSCA 12(b) - Chemical export notification: None
C	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 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 Zinc stearate
	•
	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

Clean Air Act Section 112(b)

: Not listed

<u>olyOne</u>

Version Number 1.1 Revision Date 05/22/2014 Page 13 of 15 Print Date 05/23/2014

Hazardous Air Pollutants (HAPs)		
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

: Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Classification
Titanium dioxide	0.1 - 1	СН

<u>SARA 313</u>

Not applicable.

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

ne

Version Number 1.1 Revision Date 05/22/2014 Page 14 of 15 Print Date 05/23/2014

International regulations

International lists	:	 Australia inventory (AICS): Not determined. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: Not determined. Japan inventory: Not determined. China inventory (IECSC): Not determined. Korea inventory: Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. 	
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed	
Chemical Weapons Convention	:	Not listed	
List Schedule II Chemicals			
Chemical Weapons Convention	:	Not listed	
List Schedule III Chemicals			

Section 16. Other information

History		
Date of printing	:	05/23/2014
Date of issue/Date of revision	:	05/22/2014
Date of previous issue	:	05/19/2014
Version	:	1.1
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

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.

<u>ne</u>

Version Number 1.1 Revision Date 05/22/2014 Page 15 of 15 Print Date 05/23/2014

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.