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SAFETY DATA SHEET

PG 82706.14 PEARL PU PP

Section 1. Identification		
GHS product identifier	:	PG 82706.14 PEARL PU PP
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10206932
Product type	:	solid
••		
Relevant identified uses of the subst	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	:	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.

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Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10206932

CAS number/other identifiers

Ingredient name	%	CAS number
Miscellaneous Zinc Compounds	10 - 30	0-05-5
Titanium dioxide	10 - 30	13463-67-7

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

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

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

Section 4. First aid measures

Description of necessary first aid measures

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

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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. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. 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	on and special treatment needed, if necessary
Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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



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		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.

nitrogen oxides

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. 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	waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containmen	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).
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where this



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hygiene	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
Miscellaneous Zinc Compounds	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 5 mg/m3 Form: Fume
	Short Term Exposure Limit 10 mg/m3 Form: Fume
	PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust
	PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable
	fraction
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 5 mg/m3 Form: Fume
	PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust
	PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable
	fraction
	NIOSH REL (1994-06-01)
	Time Weighted Average (TWA) 5 mg/m3 Form: Dust and fumes
	Short Term Exposure Limit 10 mg/m3 Form: Fume
	Ceiling 15 mg/m3 Form: Dust
	ACGIH TLV (2003-01-01)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 2 mg/m3 Form: Respirable fraction
	TLV-STEL: Threshold Limit Value - Short Time Exposure Level
	10 mg/m3 Form: Respirable fraction



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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
Environmental exposure controls	:	exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures 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 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.

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



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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	:	Under normal conditions of storage and use, hazardous decomposition
products		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

Product/ingredient name	Result	Species	Score	Exposure	Observation
Miscellaneous Zinc	Eyes - Mild	Rabbit		24 hrs	-
Compounds	irritant				
	Skin - Mild	Rabbit		24 hrs	-
	irritant				
Conclusion/Summary					
Skin	: M	lixture.Not fully	tested.		
Eyes	: M	lixture.Not fully	tested.		
Respiratory	: M	lixture.Not fully	tested.		
<u>Sensitization</u> Conclusion/Summary Skin Respiratory		lixture.Not fully lixture.Not fully			
<u>Mutagenicity</u>					
Conclusion/Summary	: M	lixture.Not fully	tested.		
Carcinogenicity					
		lixture.Not fully			

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Classification Product/ingredient name **OSHA** IARC NTP Miscellaneous Zinc Compounds Titanium dioxide 2B **Reproductive toxicity** Mixture.Not fully tested. **Conclusion/Summary** : **Teratogenicity Conclusion/Summary** Mixture.Not fully tested. : Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. **Aspiration hazard** Not available. Information on the likely routes of : Not available. exposure **Potential acute health effects** Eye contact No known significant effects or critical hazards. : Inhalation Exposure to decomposition products may cause a health hazard. : Serious effects may be delayed following exposure. 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 No specific data. Eye contact : No specific data. Inhalation : No specific data. Skin contact : No specific data. Ingestion : Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

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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	:	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			
Miscellaneous Zinc Compounds						
	Acute LC50 2,246,000 µg/l Fresh	Fish - Fathead minnow	96 h			
	water					
	Acute LC50 320 mg/l Fresh water	Fish - Bluegill	96 h			
	Acute LC50 1.1 mg/l Fresh water	Fish - Rainbow	96 h			
		trout,donaldson trout				
	Acute LC50 98 µg/l Fresh water	Aquatic invertebrates.	48 h			
		Water flea				
	Acute EC50 1 mg/l Fresh water	Aquatic invertebrates.	48 h			
		Water flea				
	Acute EC50 0.042 mg/l Fresh	Aquatic plants - Green	72 h			
	water	algae				



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	Acute IC50 44 µg/l Fresh water	Aquatic plants - Green algae	72 h
Titanium dioxide			
	Acute LC50 1,000,000 µg/l Marine water	Fish - Mummichog	96 h
	Acute LC50 1,000 mg/l Fresh water	Fish - Fathead minnow	96 h
	Acute LC50 5.5 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute LC50 10 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	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
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Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available a	as they are bound within the	e polymer matrix.
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are bound	nd within the
Persistence and degradability	<u>7</u>		
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are boun	nd within the
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are bound	nd within the

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Miscellaneous Zinc		60,960.00	high
Compounds			
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient : Not available.

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(KOC) Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

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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 Classification	:	Not regulated for transportation.
ICAO/IATA	:	Consult mode specific transport rules
IMO/IMDG (maritime)	:	Consult mode specific transport rules

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
		listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed

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		United States - TSCA 6 - Final i United States - TSCA 6 - Propo United States - TSCA 8(a) - Che United States - TSCA 8(a) - Dio United States - TSCA 8(a) - Che determined United States - TSCA 8(a) - Pre (PAIR): Not listed United States - TSCA 8(c) - Sign Not listed United States - TSCA 8(c) - Hea	sed risk management: Not listed emical risk rules: Not listed exin/Furane precusor: Not listed emical Data Reporting (CDR): Not eliminary assessment report nificant adverse reaction (SAR): alth and safety studies: Not listed er act (CWA) section 307 - Priority	
		release prevention - Flammable United States - EPA Clean air a release prevention - Toxic subst	ed act (CAA) section 112 - Accidental substances: Not listed act (CAA) section 112 - Accidental	
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 Chemicals)	:	Not listed		
US. EPA CERCLA Hazardous Substances (40 CFR 302)				
not applicable SARA 311/312				
Classification	:	Not applicable.		
Composition/information on ingredients				
Name	%		Classification	



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Miscellaneous Zinc Compounds	10 - 30	F, AH
Titanium dioxide	10 - 30	СН

SARA 313

	Product name	CAS number	%
Form R - Reporting	Miscellaneous Zinc	0-05-5	0
requirements	Compounds		
Supplier notification	Miscellaneous Zinc	0-05-5	0
	Compounds		

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

State regulations	
Massachusetts	: The following components are listed: Miscellaneous Zinc Compounds Titanium dioxide Silica, amorphous Mica
New York	: None of the components are listed.
New Jersey	: The following components are listed: Miscellaneous Zinc Compounds Titanium dioxide Mica
Pennsylvania	: The following components are listed: Miscellaneous Zinc Compounds
	Titanium dioxide
	Silica, amorphous

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		
International lists	:	Australia inventory (AICS): Not determined. Taiwan inventory (CSNN): Not determined.

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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	
Chemical Weapons Convention	
List Schedule II Chemicals	
Chemical Weapons Convention	
List Schedule III Chemicals	

Not listed

Not listed

: Not listed

Section 16. Other information

History Date of printing 10/25/2014 : Date of issue/Date of revision 10/21/2014 : Date of previous issue 00/00/0000 : Version 1.0 : 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 Not available. References

Notice to reader

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