



SAFETY DATA SHEET

Section 1. Identification

Manufacturer

Polymeric Systems, Inc.
47 Park Avenue
Elverson, PA 19520
Tel: (610) 286-2500
Fax: (610) 286-2510
Web: polymericystems.com

Supplier

Polymeric Systems, Inc.
47 Park Avenue
Elverson, PA 19520
Tel: (610) 286-2500
Fax: (610) 286-2510
Web: polymericystems.com

Emergency telephone number

(610)286-2500 (24 Hours) Chemtrec Contract No.: 17567

Product name

PSI-803 GRAY - MS SLNT - 10.3oz [12 PACK

Code

FG600803125

Section 2. Hazards identification

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 1A

GHS label elements

Hazard pictograms



Signal word

Danger

Hazard statements

May cause cancer.

Precautionary statements

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 locked up.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

None known.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Ingredient name	% by weight	CAS number
titanium dioxide	0.1 - 1	13463-67-7
crystalline silica non-respirable	0.1 - 1	14808-60-7

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

Section 4. First aid measures

Description of necessary first aid measures

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 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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.
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

Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Over-exposure signs/symptoms

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

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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical No specific fire or explosion hazard.

[National Fire Protection Association \(U.S.A.\)](#)



Hazardous thermal decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

[Personal precautions, protective equipment and emergency procedures](#)

For non-emergency personnel

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](#)

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

Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 27°C (80.6°F). 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 locked up. 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.

[Precautions for safe handling](#)

Section 7. Handling and storage

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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	CAS #	Exposure limits
titanium dioxide	13463-67-7	<p>ACGIH TLV (United States, 3/2012). TWA: 10 mg/m³ 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m³ 8 hours. Form: Total dust</p> <p>OSHA PEL (United States, 6/2010). TWA: 15 mg/m³ 8 hours. Form: Total dust</p>
crystalline silica non-respirable	14808-60-7	<p>OSHA PEL Z3 (United States, 9/2005). Notes: 250/(%SiO₂+5) TWA: 250 MPPCF / (%SiO₂+5) 8 hours. Form: Respirable</p> <p>OSHA PEL Z3 (United States, 9/2005). Notes: 10/(SiO₂+2) TWA: 10 MG/M3 / (%SiO₂+2) 8 hours. Form: Respirable</p> <p>ACGIH TLV (United States, 3/2012). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</p> <p>NIOSH REL (United States, 1/2013). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust</p> <p>OSHA PEL Z3 (United States, 9/2005). Notes: 30/(%SiO₂+2) TWA: 30 MG/M3 / (%SiO₂+2) 8 hours. Form: Total dust.</p>

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.

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.

Skin protection

Section 8. Exposure controls/personal 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 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.
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.

Section 9. Physical and chemical properties

Physical state	Solid. [Viscous mass.]
Color	Gray.
Odor	Not available.
Odor threshold	Not available.
pH	Not applicable.
Melting point	Not available.
Boiling point	Not available.
Flash point	Closed cup: Not applicable. [Product does not sustain combustion.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.7
Solubility	Insoluble in the following materials: cold water and hot water.
Solubility in water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	>90°C (>194°F)
Viscosity	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.

Section 10. Stability and reactivity

Incompatible materials No specific data.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

No specific data.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Sensitization

No specific data.

Mutagenicity

No specific data.

Carcinogenicity

No specific data.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide crystalline silica non-respirable	- -	2B 1	- Known to be a human carcinogen.

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

No specific data.

Specific target organ toxicity (repeated exposure)

No specific data.

Aspiration hazard

No specific data.

Information on the likely routes of exposure Not available.

Potential acute health effects

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.

Section 11. Toxicological information

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

Short term exposure

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

No specific data.

General	No known significant effects or critical hazards.
Carcinogenicity	May cause 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

Route	ATE value
Oral	41979 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

No specific data.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
titanium dioxide	-	352	low

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{oc}) Not available.

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.

RCRA classification Not available.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-

Special precautions for user **Transport within user's premises:** always transport in closed 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 TSCA 4(a) final test rules: tetramethyl orthosilicate
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 311: ethylenediamine

Section 15. Regulatory information

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

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ethylenediamine	0 - 0.1	Yes.	10000	1334.1	5000	667

SARA 304 RQ 77639751.6 lbs / 35248447.2 kg

SARA 311/312

Classification Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
titanium dioxide	0.1 - 1	No.	No.	No.	No.	Yes.
crystalline silica non-respirable	0.1 - 1	No.	No.	No.	No.	Yes.

State regulations

Massachusetts

The following components are listed: CALCIUM CARBONATE

New York

None of the components are listed.

New Jersey

The following components are listed: CALCIUM CARBONATE; LIMESTONE; SILICA, QUARTZ; QUARTZ (SiO₂); TITANIUM DIOXIDE; TITANIUM OXIDE (TiO₂)

Pennsylvania

The following components are listed: LIMESTONE; QUARTZ (SiO₂); TITANIUM OXIDE (TiO₂)

Minnesota Hazardous Substances

None of the components are listed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
titanium dioxide	Yes.	No.	No.	No.
crystalline silica non-respirable	Yes.	No.	No.	No.
carbon black non-respirable	Yes.	No.	No.	No.
methanol	No.	Yes.	No.	No.

Canada inventory

Not determined.

International regulations

Section 15. Regulatory information

International lists

Australia inventory (AICS): At least one component is not listed.

China inventory (IECSC): At least one component is not listed.

Japan inventory: Not determined.

Korea inventory: At least one component is not listed.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): At least one component is not listed.

Philippines inventory (PICCS): At least one component is not listed.

Taiwan inventory (CSNN): Not determined.

Substances of very high concern

None of the components are listed.

Section 16. Other information

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.

✔ Indicates information that has changed from previously issued version.

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