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SAFETY DATA SHEET

GEON 85857 LHB TAN (PRICING ONLY)

Section 1. Identification		
GHS product identifier	:	GEON 85857 LHB TAN (PRICING ONLY)
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	VC10009520
Product type	:	solid
Relevant identified uses of the sub	stance	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	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure
(with hours of operation)		or accident).CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire,
		exposure or accident).

Section 2. Hazards identification

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This mixture has not been evaluated as a whole for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions.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.



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GHS label elements

ical hazards.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	VC10009520

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	5 - 10	13463-67-7
Dibutyltin mercaptide	1 - 5	10584-98-2

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



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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 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	:	No known significant effects or critical hazards. 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.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical atte	ntio	n 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.



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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	:	May emit Hydrogen Chloride (HCl). Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds 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 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).



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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 Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept 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
	ACGIH TLV (1996-05-18)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
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		Permissible Exposure Level 10 mg/m3
Dibutyltin mercaptide		OSHA PEL (1993-06-30) expressed as Sn PEL: Permissible Exposure Level 0.1 mg/m3 NIOSH REL (1994-06-01) expressed as Sn Time Weighted Average (TWA) 0.1 mg/m3 OSHA PEL 1989 (1989-03-01) expressed as Sn PEL: Permissible Exposure Level 0.1 mg/m3 Form: Organic. ACGIH TLV (1996-05-18) expressed as Sn TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 0.1 mg/m3 ACGIH TLV (1994-09-01) expressed as Sn TLV-STEL: Threshold Limit Value - Short Time Exposure Level 0.2 mg/m3
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures Eye/face protection	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used
		when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a 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.
		CIAE



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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		TAN
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.
(naninable) mints		Opper. Not available.
Vapor pressure	:	Not available.
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Vapor pressure	:	Not available.
Vapor pressure Vapor density	:	Not available. Not available.
Vapor pressure Vapor density Relative density	:	Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility	:	Not available. Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility Solubility in water	::	Not available. Not available. Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n-	: : : : : : : : : : : : : : : : : : : :	Not available. Not available. Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water		Not available. Not available. Not available. Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature		Not available. Not available. Not available. Not available. Not available. Not available.
Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature		Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.



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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	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
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	-
Dibutyltin mercaptide				
	LD50 Oral	Rat	510 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		
Conclusion/Summary Skin Eyes Respiratory	: Mixtu	rre.Not fully tested. rre.Not fully tested. rre.Not fully tested.		
<u>Sensitization</u> Conclusion/Summary Skin Respiratory		rre.Not fully tested. rre.Not fully tested.		



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Mutagenicity				
Conclusion/Summary	:	Mixture.Not full	y tested.	
Carcinogenicity				
Conclusion/Summary Classification	:	Mixture.Not full	y tested.	
Product/ingredient name	OSHA	IARC	NTP	
Titanium dioxide		2B		
Reproductive toxicity				
Conclusion/Summary	:	Mixture.Not full	y tested.	
<u>Teratogenicity</u>				
Conclusion/Summary	:	Mixture.Not full	y tested.	
Specific target organ toxicity Not available.	(single expo	<u>osure)</u>		
Specific target organ toxicity Not available.	(repeated e	exposure)		
Aspiration hazard Not available.				
Information on the likely rout exposure	es of 🛛 :	Not available.		
Potential acute health effects				
Eye contact Inhalation	:	Exposure to deco	icant effects or critical hazards. omposition products may cause a health hazard. hay be delayed following exposure.	
Skin contact Ingestion	:	No known signif	icant effects or critical hazards. icant effects or critical hazards.	
Symptoms related to the physi	cal, chemic	cal and toxicologi	cal characteristics	
Eye contact	:	No specific data.		
Inhalation	:	No specific data.		



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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		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.
Numerical measures of toxicity		
Acute toxicity estimates		

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Mummichog	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh	Fish - Fathead minnow	96 h
	water		



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	Acute LC50 13 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 27.8 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 35.306 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
GEON 85857 LHB TAN (PRI	CING ONLY)		
Remarks - Acute - Aquatic	Chemicals are not readily available	as they are bound within the	polymer matrix.
invertebrates.:			
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are bour	nd within the
Persistence and degradability	<u>Y</u>		
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are bour	nd within the
Conclusion/Summary	: Chemicals are not readi polymer matrix.	ly available as they are boun	nd within the

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low
Dibutyltin mercaptide	3.4	-	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

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
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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
		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 Chromium (III) oxide

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Vinyl chloride monomer

United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I	:	Not listed
Substances Clean Air Act Section 602 Class II	:	Not listed
Substances DEA List I Chemicals (Precursor		Not listed
Chemicals)		
DEA List II Chemicals (Essential 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
Titanium dioxide	5 - 10	СН
Dibutyltin mercaptide	1 - 5	АН

<u>SARA 313</u>

Not applicable.

S	ta	te	reg	ula	<u>atio</u>	ons
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Massachusetts	:	The following components are listed: Titanium dioxide
New York New Jersey	:	None of the components are listed. The following components are listed:

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Pennsylvania	:	Ethene, chloro-, homopolymer Titanium dioxide 2-Propenenitrile, polymer with Ethenylbenzene The following components are listed: Titanium dioxide
<u>California Prop. 65</u> WARNING: This product contains a c	hemi	cal 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. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. 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 List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

<u>History</u>		
Date of printing	:	09/12/2015
Date of issue/Date of revision	:	08/07/2015
Date of previous issue	:	04/24/2015
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



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	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

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.