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SAFETY DATA SHEET

258115#SR-24904 7403C Yellow

Section 1. Identificati	on
GHS product identifier Chemical name CAS number Other means of identification Product type	 258115#SR-24904 7403C Yellow Mixture Mixture EM10042982 solid
<u>Relevant identified uses of the sub</u> Product use	 stance or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	 NEU Specialty Engineered Materials, LLC. 15 Corporate Drive, North Haven, CT 06473 1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone number (with hours of operation)	: CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
GHS label elements		
Signal word Hazard statements	:	No signal word. No known significant effects or critical hazards.

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Precautionary statements

General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	EM10042982

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	0 - 10	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.
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

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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	:	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.

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 attention and special treatment needed, if necessary

Notes to physician Specific treatments	: :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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. Firefighting measures

Extinguishing media

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

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Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and selfcontained 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 specialized 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 Methods and materials for containme	: ent a	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).
Small spill Large 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. 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

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drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
Titanium dioxide		OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust NIOSH REL (1994-06-01)
		ACGIH TLV (1996-05-18) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures 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
Skin protection		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.

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Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical product 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	 Approved by a specialist before handling this product. 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	: Based on the hazard and potential for exposure, select a respirator tha meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting training and other important aspects of use

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	YELLOW
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.

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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	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Conclusion/Summary	• Mixtu	re Not fully tested		•

Conclusion/Summary

Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				
Conclusion/Summary					
Skin	: M	ixture.Not full	y tested.		
Eyes	: M	ixture.Not full	y tested.		
Respiratory	: M	ixture.Not full	y tested.		
<u>Sensitization</u> Conclusion/Summary Skin	: M	ixture.Not full	v tested		
Respiratory		ixture.Not full	•		
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Mutagenicity					
Conclusion/Summary	:	Mi	xture.Not fully t	ested.	
Carcinogenicity					
Conclusion/Summary Classification	:	Mi	xture.Not fully t	ested.	
Product/ingredient	OSHA		IARC	NTP	
name					
Titanium dioxide			2B		
<u>Reproductive toxicity</u>					
Conclusion/Summary	:	Mi	xture.Not fully t	ested.	
Teratogenicity					
Conclusion/Summary	:	Mi	xture.Not fully t	ested.	
Specific target organ toxicity Not available.	<u>(single expo</u>	<u>osur</u>	<u>e)</u>		
Specific target organ toxicity Not available.	<u>(repeated e</u>	expos	<u>sure)</u>		
Aspiration hazard Not available.					
Information on likely routes exposure	of :	Not	t available.		
Potential acute health effects					
Eye contact	:	No	known significa	ant effects or critical hazards.	
Inhalation	:			ant effects or critical hazards.	
Skin contact	:			ant effects or critical hazards.	
Ingestion	:	No	known significa	ant effects or critical hazards.	
Symptoms related to the phys	sical, chemic	cal a	nd toxicologica	l characteristics	
Eye contact	:	No	specific data.		
Inhalation	:		specific data.		
Skin contact	:		specific data.		
Ingestion	:		specific data.		

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

:	Not available. Not available.
:	Not available. Not available.
:	Mixture.Not fully tested.
	No known significant effects or critical hazards. No known significant effects or critical hazards.
	:

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Fish	96 h
	Marine water		
	Acute $LC50 > 1,000 \text{ mg/l Fresh}$	Fish - Fish	96 h
	water		
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates.	48 h

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		Crustaceans	
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 35.306 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
258115#SR-24904 7403C Yell	ow	▲	
Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available a	as they are bound within the	e polymer matrix.
Conclusion/Summary	: Chemicals are not readil polymer matrix.	ly available as they are bou	nd within the
Persistence and degradability	<u>y</u>		
Conclusion/Summary	: Chemicals are not readily polymer matrix.	ly available as they are bou	nd within the
Conclusion/Summary	: Chemicals are not readily polymer matrix.	ly available as they are bou	nd within the

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		-	low

Mobility in soil

Soil/water partition coefficient (KOC)	:	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
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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 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	:	Not classified as dangerous goods under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	:	 United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: 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) - Chemical Data Reporting (CDR): Not determined

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		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: Not listed 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) 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
Titanium dioxide	0 - 10	СН

SARA 313 Not applicable.

S	tate	regulations	

Massachusetts	:	None of the components are listed.
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:

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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 : At least one component is not listed in DSL but all such componen are listed in NDSL.	ts		
International regulations			
Inventory list			
Australia : Not determined.			
Canada : At least one component is not listed in DSL but all such componen are listed in NDSL.	its		
China : Not determined.			
Europe inventory : All components are listed or exempted.			
Japan : Not determined.			
New Zealand : Not determined.			
Philippines : Not determined.			
Republic of Korea:All components are listed or exempted.Taiwan:All components are listed or exempted.			
Turkey : Not determined.			
United States All components are listed or exempted.			

Section 16. Other information

History		
Date of printing	:	11/11/2017
Date of issue/Date of revision	:	11/08/2017
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 = International Convention for the Prevention of Pollution From
		Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

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References

UN = United Nations Not available.

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