Version Number 1.0 Revision Date 05/11/2018 NEU

# SAFETY DATA SHEET

2363-75D, 25% BaSO4, 1.0% TiO2 Avon Lake

Section 1. Identificati	on	
GHS product identifier Chemical name CAS number Other means of identification Product type	::	2363-75D, 25% BaSO4, 1.0% TiO2 Avon Lake Mixture EM10044440 solid
<u>Relevant identified uses of the sub</u> Product use	stance :	e or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	<b>NEU Specialty Engineered Materials, LLC.</b> <b>15 Corporate Drive, North Haven, CT 06473</b> 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.

Version Number 1.0 Revision Date 05/11/2018 Page 2 of 14 Print Date 05/12/2018

NEU

**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	:	EM10044440

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	0.3 - 1	13463-67-7

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

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

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

#### **Section 4. First aid measures**

Description of necessary first aid measures

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. 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

Version Number 1.0 Revision Date 05/11/2018 Page 3 of 14 Print Date 05/12/2018

NEU

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: sulfur oxides 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

Version Number 1.0 Revision Date 05/11/2018 NEU

		personal risk or without suitable training.
Special protective equipment for	:	Fire-fighters should wear appropriate protective equipment and self-
fire-fighters		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 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	:	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 contain	nent a	nd 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,

Version Number 1.0 Revision Date 05/11/2018 NEU

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 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	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Version Number 1.0 Revision Date 05/11/2018 Page 6 of 14 Print Date 05/12/2018

NEU

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	<ul> <li>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.</li> </ul>
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that 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	: WHITE	
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	: <b>Dynamic:</b> Not availab	le.

Version Number 1.0 Revision Date 05/11/2018

Page 7 of 14 Print Date 05/12/2018

NEU

Kinematic: Not available.

### Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# 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				
Remarks - Oral:	No applicable toxic	city data		
	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 irritant	Human		72 hrs	-
Conclusion/Summary		-		·	
Skin	: N	lixture.Not fu	lly tested.		
Eyes	: N	lixture.Not fu	lly tested.		
Respiratory	• N	lixture.Not fu	llv tested		

**Conclusion/Summary** 

Version Number 1.0 Revision Date 05/11/2018 Page 8 of 14 Print Date 05/12/2018

NEU

Skin	:	Mixture.Not fu	lly tested.	
Respiratory	:	Mixture.Not fu	lly tested.	
<b>Mutagenicity</b>				
<u>ivitagementy</u>				
Conclusion/Summary	:	Mixture.Not fu	lly tested.	
<b>Carcinogenicity</b>				
Conclusion/Summary Classification	:	Mixture.Not fu	lly tested.	
Product/ingredient	OSHA	IARC	NTP	
name	USIIA	IARC		
Titanium dioxide		2B		
<b><u>Reproductive toxicity</u></b>				
Conclusion/Summary	:	Mixture.Not fu	lly tested.	
<u>Teratogenicity</u>				
Conclusion/Summary	:	Mixture.Not fu	lly tested.	
Specific target organ toxicity Not available.	<u>(single exp</u>	<u>oosure)</u>		
Specific target organ toxicity Not available.	(repeated	<u>exposure)</u>		
Aspiration hazard Not available.				
Information on likely routes of exposure	of :	Not available.		
Potential acute health effects				
Eye contact	:	No known sign	ificant effects or critical hazards.	
Inhalation	:		ificant effects or critical hazards.	
Skin contact	:		ificant effects or critical hazards.	
Ingestion	:	No known sign	ificant effects or critical hazards.	
Symptoms related to the phys	sical, chemi	ical and toxicolog	gical characteristics	
Eye contact	:	No specific dat	9	
Inhalation	:	No specific dat		
Skin contact	•	No specific dat		
SKIII COIITACI	:	no specific dat	a.	

Version Number 1.0 Revision Date 05/11/2018 Page 9 of 14 Print Date 05/12/2018

NEU

Ingestion	:	No specific data.
Delayed and immediate effects as we	ell as	chronic effects from short and long-term exposure
Short term exposure		
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 Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects	:::::::::::::::::::::::::::::::::::::::	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 Mg/l Marine water	Fish - Fish	96 h
Remarks - Acute - Fish:	Acute		
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		

Version Number 1.0 Revision Date 05/11/2018 Page 10 of 14 Print Date 05/12/2018

NEU

	Acute LC5	0 6.5 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute			
Remarks - Acute - Aquatic plants:	No applica	ble toxicity data		
Remarks - Chronic - Fish:	No applica	ble toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applica	ble toxicity data		
2363-75D, 25% BaSO4, 1.0%	TiO2 Avon 1	Lake		
Remarks - Acute - Aquatic invertebrates.:	Chemicals	are not readily available a	s 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 readil polymer matrix.	ly available as they are bou	nd within the
Conclusion/Summary	:	Chemicals are not readil polymer matrix.	ly available as they are bou	nd within the
<b>Bioaccumulative potential</b> Not available.				
<u>Mobility in soil</u>				
Soil/water partition coefficie (KOC)	ent :	Not available.		
Other adverse effects	:	No known significant ef	fects or critical hazards.	
Section 13. Dispos	al consi	derations		

**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

Version Number 1.0 Revision Date 05/11/2018 Page 11 of 14 Print Date 05/12/2018

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.

NEU

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

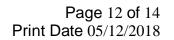
#### Section 14. Transport information

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	of th Unit Unit Unit Unit listec Unit Not l	ed States - TSCA 5(a)2 - Proposed significant new use rules: isted ed States - TSCA 5(e) - Substances consent order: Not listed
	Unit	ed States - TSCA 5(a)2 - Final significant new use rules: Not
		· · ·
		ed States - TSCA 6 - Final risk management: Not listed
		ed States - TSCA 6 - Proposed risk management: Not listed
	Unit	ed States - TSCA 8(a) - Chemical risk rules: Not listed
	Unit	ed States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
		ed States - TSCA 8(a) - Chemical Data Reporting (CDR): Not mined
	Unit	ed States - TSCA 8(a) - Preliminary assessment report
	(PAI	<b>R</b> ): Not listed
	Unit	ed States - TSCA 8(c) - Significant adverse reaction (SAR):
	Not l	isted
	Unit	ed States - TSCA 8(d) - Health and safety studies: Not listed
	Unit	ed States - EPA Clean water act (CWA) section 307 - Priority

Version Number 1.0 Revision Date 05/11/2018



FU

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	:	Not listed
Substances Clean Air Act Section 602 Class II		Not listed
Substances	•	
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
DEA List II Chemicals (Essential	:	Not listed
Chemicals)		

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

#### SARA 311/312

Classification

Not applicable.

:

#### **Composition/information on ingredients**

Name	%	Classification
Titanium dioxide	0.3 - 1	СН

#### SARA 313

Not applicable.

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

12/14

Version Number 1.0 Revision Date 05/11/2018 NEU

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

#### **Section 16. Other information**

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. <u>History</u>

Date of printing	:	05/12/2018
Date of issue/Date of revision	:	05/11/2018

Version Number 1.0 Revision Date 05/11/2018 Page 14 of 14 Print Date 05/12/2018

FU

Date of previous issue Version	:	00/00/0000 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 = International Air Transport Association IBC = 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) UN = United Nations Not available.
Nelel elles	•	not available.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. 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.