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SAFETY DATA SHEET **S-BLUE 4056**

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S-BLUE 4056

Section 1. Identification			
GHS product identifier Chemical name CAS number Other means of identification Product type	:	S-BLUE 4056 Mixture Mixture FO01068415 solid	
<u>Relevant identified uses of the subs</u> Product use	tance :	e or mixture and uses advised against Industrial applications. Plastics.	
Supplier's details	:	POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012 1 (440) 930-1000 or 1 (866) POLYONE	
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).	

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	:	No signal word.
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Hazard statements

No known significant effects or critical hazards.

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	:	FO0106841

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	0.3 - 1	13463-67-7
Octamethylcyclotetrasiloxane	0 - 0.3	556-67-2

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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.



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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 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 a	ittentio	on 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 CO_2 . None known.
Specific hazards arising from the	:	No specific fire or explosion hazard.
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chemical 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.
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 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 so waterways, drains and sewers. Inform the relevant authorities if th product has caused environmental pollution (sewers, waterways, s or air).	
Methods and materials for containme	ent 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

Put on appropriate personal protective equipment (see Section 8).



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Advice on general occupational hygiene	material is handled, and face before eatir clothing and protecti	smoking should be prohibited in areas where this stored and processed. Workers should wash hands ag, drinking and smoking. Remove contaminated ve equipment before entering eating areas. See ditional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	protected from direc away from incompat drink. Keep container Containers that have upright to prevent le	with local regulations. Store in original container t sunlight in a dry, cool and well-ventilated area, ible materials (see Section 10) and food and er tightly closed and sealed until ready for use. been opened must be carefully resealed and kept akage. Do not store in unlabeled containers. Use nent 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) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TWA 10 mg/m3
Octamethylcyclotetrasiloxane	None.
Appropriate engineering controlsEnvironmental exposure controls	exposure to airborne contaminants.
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



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Eye/face protection	 remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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 [Viscous liquid.]
Color	:	BLUE
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.



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Vapor density Relative density Solubility Solubility in water	:	Not available. Not available. Not available. insoluble in water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
		Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
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

Result	Species	Dose	Exposure
No applicable toxi	city data		
LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
LD50 Dermal	Rabbit	> 5,000 mg/kg	-
LD50 Oral	Rat	1,540 mg/kg	-
LC50 Inhalation	Rat	36 Mg/l	4 h
	No applicable toxic LC50 Inhalation LD50 Dermal LD50 Oral	No applicable toxicity dataLC50 InhalationRat - MaleLD50 DermalRabbitLD50 OralRat	No applicable toxicity dataLC50 InhalationRat - Male6.82 Mg/lLD50 DermalRabbit> 5,000 mg/kgLD50 OralRat1,540 mg/kg



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	LD50 Dermal	Rat		1,770 mg/kg	-	
Conclusion/Summary	: Mixture.Not fully tested.					
I						
Irritation/Corrosion						
Product/ingredient name	Result	Species	Score	Exposure	Observation	
Titanium dioxide	Skin - Mild	Human		72 hrs	-	
	irritant					
Octamethylcyclotetrasiloxan	Eyes - Mild	Rabbit		24 hrs	-	
e	irritant					
	Skin - Mild	Rabbit		24 hrs	-	
	irritant					
Conclusion/Summary			1			
Skin		lixture.Not ful				
Eyes		lixture.Not ful lixture.Not ful				
Respiratory	: M	lixture.not fui	ily tested.			
Sensitization						
Conclusion/Summary						
Skin		lixture.Not ful				
Respiratory	: M	lixture.Not ful	lly tested.			
Mutagenicity						
Conclusion/Summary	: Mixture.Not fully tested.					
Carcinogenicity						
Conclusion/Summary Classification	: M	lixture.Not ful	lly tested.			
Product/ingredient	OSHA	IARC	NTP			
name	0.5111					
Titanium dioxide		2B				
D						
<u>Reproductive toxicity</u>						
Conclusion/Summary	: M	lixture.Not ful	lly tested.			
Teratogenicity						
Conclusion/Summary	: M	lixture.Not ful	lly tested.			
Specific target organ toxicit Not available.	y (single exposu	<u>re)</u>				

<u>PolyOne</u>

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peated e	xposure)
:	Not available.
:	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
, chemic	cal and toxicological characteristics
	No specific data. No specific data. No specific data. No specific data. 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.
	: : : : : : : : : : : : : : : : : : :

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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			
	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h	
Remarks - Acute - Aquatic invertebrates.:	Acute			
Remarks - Acute - Aquatic plants:	No applicable toxicity data			
Remarks - Chronic - Fish:	No applicable toxicity data			
Remarks - Chronic -	No applicable toxicity data			
Aquatic invertebrates.:				
Octamethylcyclotetrasiloxane				
Remarks - Acute - Fish:	No applicable toxicity data			
Remarks - Acute - Aquatic	No applicable toxicity data			
invertebrates.:				
Remarks - Acute - Aquatic	No applicable toxicity data			
plants:				
	Chronic NOEC 0.0000044 Mg/l Fresh water	Fish - Fish	93 d	
Remarks - Chronic - Fish:	Chronic			
	Chronic NOEC 0.000002 - 0.000015 Mg/l Fresh water	Aquatic invertebrates. Daphnia	21 d	
Remarks - Chronic - Aquatic invertebrates.:	Chronic			
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Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.
Persistence and degradability	<u>,</u>
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Octamethylcyclotetrasiloxane	6.488	13,400.00	high

Mobility in soil

P	:	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 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



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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) - Thial Fest Kules. 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): Listed Octamethylcyclotetrasiloxane
	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



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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)	:	Not listed
Hazardous Air Pollutants (HAPs) 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		Not listed
Chemicals)	•	THOU HISTOU

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

: Not applicable.

Composition/information on ingredients

No products were found.

Name	%	Classification
Titanium dioxide	>= 0.3 - <= 1	Delayed (chronic) health hazard
Octamethylcyclotetrasiloxan e	> 0 - <= 0.3	Fire hazard - Immediate (acute) health hazard - Delayed (chronic) health hazard

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
		Iron oxide
Pennsylvania	:	The following components are listed: Titanium dioxide



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Iron oxide

California Prop. 65

WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Titanium dioxide	No.	No.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations		
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Europe inventory	:	All components are listed or exempted.
Japan	:	Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
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

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



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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. History

Date of printing	:	02/04/2019
Date of issue/Date of revision	:	02/02/2019
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)
		UN = United Nations
References	:	Not available.

Notice to reader

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