FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018

Page 1 of 16 Print Date 04/25/2018

SAFETY DATA SHEET

FLAGSTICK BLUE

Section 1. Identification	on	
GHS product identifier	:	FLAGSTICK BLUE
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10118735
Product type	:	solid
Relevant identified uses of the subs	tance	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 (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 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.

GHS label elements

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 <u>PolyOne</u>

Page 2 of 16

Print Date 04/25/2018

 Signal word
 : No signal word.

 Hazard statements
 : No known significant effects or critical hazards.

 Precautionary statements
 : Not applicable.

 General
 : Not applicable.

 Prevention
 : Not applicable.

 Response
 : 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	:	CC10118735

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	10 - 25	13463-67-7
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters,	10 - 25	68515-48-0
C9-rich		
Carbon black	0.3 - 1	1333-86-4

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

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018

<u>PolyOne</u>

Page 3 of 16 Print Date 04/25/2018

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 Skin contact	:	No known significant effects or critical hazards. No known significant effects or critical hazards. 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	:	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. 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)

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018



Page 4 of 16 Print Date 04/25/2018

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 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 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 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 containment and cleaning up

FLAGSTICK BLUE



Version Number 1.8 Revision Date 03/21/2018	Page 5 of 16 Print Date 04/25/2018
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

Exposure limits	
OSHA PEL 1989 (1989-03-01)	
PEL: Permissible Exposure Level 3.5 mg/m3	
OSHA PEL (1993-06-30)	
PEL: Permissible Exposure Level 3.5 mg/m3	
NIOSH REL (1994-06-01)	
Time Weighted Average (TWA) 3.5 mg/m3	
Time Weighted Average (TWA)	
ACGIH TLV (2010-12-06)	
	OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 3.5 mg/m3 OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 3.5 mg/m3 NIOSH REL (1994-06-01) Time Weighted Average (TWA) 3.5 mg/m3 Time Weighted Average (TWA)

5/16

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 6 of 16 Print Date 04/25/2018

	TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction
Titanium dioxide	OSHA PEL 1989 (1989-03-01)PEL: Permissible Exposure Level 10 mg/m3Form: Total dustOSHA PEL (1993-06-30)PEL: Permissible Exposure Level 15 mg/m3Form: Total dustNIOSH REL (1994-06-01)ACGIH TLV (1996-05-18)TLV-TWA: Threshold Limit Value - Time weighted average PEL:Permissible Exposure Level 10 mg/m3Form: Total dust
1,2-Benzenedicarboxylic acid, di-C8-10- branched alkyl esters, C9-rich	
Appropriate engineering controls : Environmental exposure controls :	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 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.
	6/16



FLAGSTICK BLUE



Version Number 1.8 Revision Date 03/21/2018	Page 7 of 16 Print Date 04/25/2018
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 [Pellets.]
Color	:	BLUE
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.
Lower and apper explosive	•	
(flammable) limits	•	Upper: Not available.
	:	Upper: Not available. Not available.
(flammable) limits	:	
(flammable) limits Vapor pressure	:	Not available.
(flammable) limits Vapor pressure Vapor density	· · ·	Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density		Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility		Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water		Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n-		Not available. Not available. Not available. Not available. Not available.
(flammable) limits 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.
(flammable) limits 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.
(flammable) limits 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.

Section 10. Stability and reactivity

FLAGSTICK BLUE



Version Number 1.8	Page 8 of 16
Revision Date 03/21/2018	Print Date 04/25/2018

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			
Carbon black							
	LD50 Oral	Rat	15,400 mg/kg	-			
Remarks - Inhalation:	No applicable toxi	No applicable toxicity data					
Remarks - Dermal:	No applicable toxi	No applicable toxicity data					
Titanium dioxide							
Remarks - Oral:	No applicable toxi	No applicable toxicity data					
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h			
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-			
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich							
	LD50 Oral	Rat	10,000 mg/kg	-			
Remarks - Inhalation:	No applicable toxicity data						
Remarks - Dermal:	No applicable toxicity data						
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				
1,2-Benzenedicarboxylic	Eyes - Mild	Rabbit			-
acid, di-C8-10-branched	irritant				

<u>PolyOne</u>

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 9 of 16 Print Date 04/25/2018

Conclusion/Summary : Mixture.Not fully tested. Eyes :: Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Skin : Mixture.Not fully tested. Sensitization : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Mutagenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity : Conclusion/Summary Conclusion/Summary : Mixture.Not fully tested. Classification : Product/ingredient OSHA Product/ingredient OSHA IARC NTP name : 2B : : Carcinogenicity : Mixture.Not fully tested. : Carbon black : 2B : : Titanium dioxide : 2B : : Conclusion/Summary : Mixture.Not fully tested. : Specific target organ toxic							
Skin : Mixture.Not fully tested. Eyes : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Scinitization : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Skin : : Mutagenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Cassification : Mixture.Not fully tested. Classification : Mixture.Not fully tested. Cassification : : Product/ingredient OSHA IARC NTP name : : : Carbon black : : 2B Titanium dioxide : 2B : Reproductive toxicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) :	alkyl esters, C9-rich						
Eyes : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Sensitization						1	1
Respiratory : Mixture.Not fully tested. Sensitization							
Sensitization Sensitization Skin : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Mutagenicity Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity Conclusion/Summary : Mixture.Not fully tested. Classification Product/ingredient OSHA Paroduct/ingredient OSHA Paroduct/ingredient OSHA Titanium dioxide 2B Reproductive toxicity 2B Conclusion/Summary : Mixture.Not fully tested. Interview Conclusion/Summary : Mixture.Not fully tested. Interview Conclusion/Summary : Mixture.Not fully tested. Interview Specific target organ toxicity (single exposure) Not available. Not available. Appriction hazard Not available. Information on likely routes of : Not available. :		:					
Conclusion/Summary Skin : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Mutagenicity : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Cassification : : Product/ingredient OSHA IARC Name : : Carcinoblack : 2B Titanium dioxide : 2B Carconoblack : 2B Conclusion/Summary : Mixture.Not fully tested. Teratogenicity : Mixture.Not fully tested. Specific target organ toxicity (single exposure) : Not available. : : Aspiration hazard : : Not available.	Respiratory	:	M	ixture.Not full	y tested.		
Skin : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Mutagenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Cassification : : Product/ingredient OSHA IARC NTP Carbon black 2B : : Carbon black 2B : : Titanium dioxide 2B : : Conclusion/Summary : Mixture.Not fully tested. Teratogenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. : : Specific target organ toxicity (repeated exposure) Not available. : : Aspiration hazard Not available. : : : Information on likely routes of : : : :	Sensitization						
Skin : Mixture.Not fully tested. Respiratory : Mixture.Not fully tested. Mutagenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Cassification : : Product/ingredient OSHA IARC NTP Carbon black 2B : : Carbon black 2B : : Titanium dioxide 2B : : Conclusion/Summary : Mixture.Not fully tested. Teratogenicity : Mixture.Not fully tested. Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. : : Specific target organ toxicity (repeated exposure) Not available. : : Aspiration hazard Not available. : : : Information on likely routes of : : : :	Conclusion/Summary						
Mutagenicity Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity Conclusion/Summary : Mixture.Not fully tested. Cassification Product/ingredient OSHA IARC NTP name 2B Carbon black 2B Titanium dioxide 2B Seperoductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Spiration hazard Not available. Information on likely routes of : Not available.		:	M	ixture.Not full	y tested.		
Conclusion/Summary : Mixture.Not fully tested. Carcinogenicity Conclusion/Summary : Mixture.Not fully tested. Classification Product/ingredient OSHA IARC NTP Carbon black 2B	Respiratory	:	M	ixture.Not full	y tested.		
Carcinogenicity Conclusion/Summary : Mixture.Not fully tested. Cassification Product/ingredient OSHA IARC NTP name 2B Carbon black 2B Titanium dioxide 2B Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.	Mutagenicity						
Conclusion/Summary : Mixture.Not fully tested. Product/ingredient OSHA IARC NTP name 2B	Conclusion/Summary	:	M	ixture.Not full	y tested.		
Classification OSHA IARC NTP name 2B	Carcinogenicity						
name 2B Carbon black 2B Titanium dioxide 2B Reproductive toxicity 2B Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.		:	M	ixture.Not full	y tested.		
Carbon black 2B Titanium dioxide 2B Reproductive toxicity 2B Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Not available. Aspiration hazard Not available. Not available. Information on likely routes of : Not available.	Product/ingredient	OSHA		IARC	NTP		
Titanium dioxide 2B Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Information on likely routes of : Not available.							
Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.							
Conclusion/Summary : Mixture.Not fully tested. Teratogenicity	Titanium dioxide			2B			
Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.	<u>Reproductive toxicity</u>						
Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. :: Not available. Specific target organ toxicity (repeated exposure) Not available. :: Not available. Aspiration hazard Not available. :: Not available. Information on likely routes of : Not available.	Conclusion/Summary	Conclusion/Summary : Mixture.Not fully tested.					
Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.	<u>Teratogenicity</u>	Teratogenicity					
Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of : Not available.	Conclusion/Summary	Conclusion/Summary : Mixture.Not fully tested.					
Not available. <u>Aspiration hazard</u> Not available. Information on likely routes of : Not available.							
Not available. Information on likely routes of : Not available.							
	Information on likely routes exposure	of :	No	ot available.			



FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 10 of 16 Print Date 04/25/2018

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.

Symptoms related to the physical, chemical and toxicological characteristics

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

Delayed and immediate effects as well 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	:	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.

FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018



Page 11 of 16 Print Date 04/25/2018

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure			
Carbon black						
Remarks - Acute - Fish:	No applicable toxicity data					
	Acute EC50 37.563 Mg/l Fresh	Aquatic invertebrates.	48 h			
	water	Daphnia				
Remarks - Acute - Aquatic	Acute					
invertebrates.:						
Remarks - Acute - Aquatic	No applicable toxicity data					
plants:						
Remarks - Chronic - Fish:	No applicable toxicity data					
Remarks - Chronic -	No applicable toxicity data					
Aquatic invertebrates.:						
Titanium dioxide			0.61			
	Acute LC50 > 1,000 Mg/l Marine	Fish - Fish	96 h			
	water					
Remarks - Acute - Fish:	Acute		40.1			
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates.	48 h			
	A /	Crustaceans				
Remarks - Acute - Aquatic	Acute					
invertebrates.:	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates.	48 h			
	Acute LC50 0.5 Mg/I Flesh water	Daphnia	40 11			
Remarks - Acute - Aquatic	Acute	Dapinna				
invertebrates.:	Acute					
Remarks - Acute - Aquatic	No applicable toxicity data					
plants:	The applicable toxicity data	No applicable toxicity data				
Remarks - Chronic - Fish:	No applicable toxicity data					
Remarks - Chronic -	No applicable toxicity data					
Aquatic invertebrates.:	The applicable tonicity data					
	dicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich					
Remarks - Acute - Fish:	No applicable toxicity data					
Remarks - Acute - Aquatic	No applicable toxicity data					
invertebrates.:	11 2					
Remarks - Acute - Aquatic	No applicable toxicity data					
plants:	** *					
Remarks - Chronic - Fish:	No applicable toxicity data					
Remarks - Chronic -	No applicable toxicity data					
Aquatic invertebrates.:						
FLAGSTICK BLUE						



FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 12 of 16 Print Date 04/25/2018

Remarks - Acute - Aquatic	Chemicals are not readily available as they are bound within the polymer matrix.	
invertebrates.:		
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.	
Persistence and degradability	<u>Y</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
1,2-Benzenedicarboxylic acid, di-C8-	8.8	3.00	low
10-branched alkyl esters, C9-rich			

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 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



FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 13 of 16 Print Date 04/25/2018

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	:	Consult mode specific transport rules
International Water IMO/IMDG	:	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: Listed 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich
	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 Phthalocyanine Blue
	Zinc stearate

FLAGSTICK BLUE

<u>PolyOne</u>

Version Number 1.8 Revision Date 03/21/2018 Page 14 of 16 Print Date 04/25/2018

Fatty acids, C16-18, zinc salts Vinyl chloride monomer

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)	:	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		Not lists d
DEA List I Chemicals (Precursor	:	Not listed
Chemicals) DEA List II Chemicals (Essential	:	Not listed
Chemicals)	•	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
Carbon black	0.3 - 1	СН
Titanium dioxide	10 - 25	СН
1,2-Benzenedicarboxylic acid, di- C8-10-branched alkyl esters, C9- rich	10 - 25	АН

SARA 313

Not applicable.

State regulations

FLAGSTICK BLUE

ŀ	bh	vOne.
_		

Version Number 1.8 Revision Date 03/21/2018

Page 15 of 16 Print Date 04/25/2018

Massachusetts	:	None of the components are listed.
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:
		Calcium carbonate
		Ethene, chloro-, homopolymer
		Titanium dioxide
		Phthalocyanine Blue
		Carbon black
Pennsylvania	:	The following components are listed:
•		Carbon black
		Phthalocyanine Blue
		-
		Titanium dioxide

Calcium carbonate

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	:	Not determined.
International regulations		
<u>Inventory list</u>		
Australia	:	Not determined.
Canada	:	Not determined.
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	:	Not determined.
Taiwan	:	All components are listed or exempted.
Turkey	:	All components are listed or exempted.
United States	:	All components are listed or exempted.

: All components are listed or exempted.

Section 16. Other information

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



FLAGSTICK BLUE

Version Number 1.8 Revision Date 03/21/2018 Page 16 of 16 Print Date 04/25/2018

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. History

History		
Date of printing	:	04/25/2018
Date of issue/Date of revision	:	03/21/2018
Date of previous issue	:	03/24/2015
Version	:	1.8
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

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.