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SAFETY DATA SHEET

DARK BLUE PBT

Section 1. Identification		
GHS product identifier	:	DARK BLUE PBT
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10203210
Product type	:	solid
Relevant identified uses of the subs	stance	or mixture and uses advised against
Product use	:	Industrial applications. Plastics.
Supplier's details		POLYONE CORPORATION
Supplier 5 details	·	33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
Emorgonov tolonhono numbor		CHEMTREC 1 800 424 0200 (24km for mill look fine surround
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
		r · · · · · · · · · · · · · · · · · · ·

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 MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.
	:	Not applicable.



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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	:	CC10203210

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	0.1 - 1	1333-86-4
Titanium dioxide	0.1 - 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. 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

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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 Inhalation Skin contact Ingestion Over-exposure signs/symptoms	:	No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. No known significant effects or critical hazards. No known significant effects or critical hazards.	
<u> </u>			
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	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
Specific treatments	:	No specific treatment.	
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.	

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$. 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: carbon dioxide



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		carbon monoxide nitrogen 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 personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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

Protective measures

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



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Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Carbon black	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)
	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/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



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Environmental exposure controls	:	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.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state:solid [Pellets.]Color:BLUE



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	T i i i	
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 a	vailable.
(flammable) limits	Upper: Not a	available.
Vapor pressure	: Not available	
Vapor density	: Not available	
Relative density	: Not available	
Solubility	: Not available	
Solubility in water	: insoluble in w	vater.
Partition coefficient: n- octanol/water	: Not available	
Auto-ignition temperature	: Not available	
Decomposition temperature	: Not available	
SADT	: Not available	
Viscosity	: Dynamic: No	ot available.
•	Kinematic: N	lot 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



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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	-
Titanium dioxide				
Conclusion/Summary	:	Mixture.Not fully tested.		
Irritation/Corrosion				
Conclusion/Summary				
Skin	:	Mixture.Not fully tested.		
Eyes		Mixture.Not fully tested.		
Respiratory	:	Mixture.Not fully tested.		
<u>Sensitization</u>				
Conclusion/Summary				
Skin		Mixture.Not fully tested.		
Respiratory	:	Mixture.Not fully tested.		
Mutagenicity				
Conclusion/Summary	:	Mixture.Not fully tested.		
Carcinogenicity				
Conclusion/Summary Classification	:	Mixture.Not fully tested.		
Product/ingredient name	OSHA	IARC	NTP)
Carbon black		2B		
Titanium dioxide		2B		
<u>Reproductive toxicity</u>				
Conclusion/Summary	:	Mixture.Not fully tested.		
Teratogenicity				
Conclusion/Summary	:	Mixture.Not fully tested.		
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Specific target organ toxicity (single Not available.	e exp	<u>osure)</u>
Specific target organ toxicity (repeation Not available.	ted (exposure)
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	Exposure to decomposition products may cause a health hazard.
Skin contact		Serious effects may be delayed following exposure.
Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
ingestion	•	to known signmeant effects of efficient nazards.
Symptoms related to the physical, ch	nemi	cal 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 and a	also o	chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.



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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.
Fertility effects	:	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	
Titanium dioxide				
	Acute LC50 1,000,000 µg/l Marine	Fish - Mummichog	96 h	
	water			
	Acute LC50 1,000 mg/l Fresh water	Fish - Fathead minnow	96 h	
	Acute LC50 1,000,000 µg/l Marine water	Fish - Mummichog	96 h	
	Acute LC50 5.5 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute LC50 10 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute EC50 100 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h	
	Acute EC50 35.9 mg/l Fresh water	Aquatic plants - Green algae	72 h	
	Acute EC50 5.83 mg/l Fresh water	Aquatic plants - Green algae	72 h	
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Remarks - Acute - Aquatic invertebrates.:	-	s they are bound within the	e polymer matrix.	
Conclusion/Summary	: Chemicals are not readily available as they are bound within the			



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		polymer matrix.
Persistence and degradability		
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
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient (KOC)	:	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

Section 14. Transport information

U.S. DOT Classification : Not regulated for transportation.



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ICAO/IATA : Consult mode specific transport rules

IMO/IMDG (maritime) : Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: None
		of the components are listed.
		United States - TSCA 4(a) - Final Test Rules: Not listed
		United States - TSCA 4(a) - ITC Priority list: Not listed
		United States - TSCA 4(a) - Proposed test rules: Not listed
		United States - TSCA 4(f) - Priority risk review: Not listed
		United States - TSCA 5(a)2 - Final significant new use rules: Not listed
		United States - TSCA 5(a)2 - Proposed significant new use rules:
		Not listed
		United States - TSCA 5(e) - Substances consent order: Not listed
		United States - TSCA 6 - Final risk management: Not listed
		United States - TSCA 6 - Proposed risk management: Not listed
		United States - TSCA 8(a) - Chemical risk rules: Not listed
		United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
		United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not
		determined
		United States - TSCA 8(a) - Preliminary assessment report
		(PAIR): Not listed
		United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed
		United States - TSCA 8(d) - Health and safety studies: Not listed
		United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Phthalocyanine blue
		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

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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)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Carbon black	0.1 - 1	CH
Titanium dioxide	0.1 - 1	СН

SARA 313

Not applicable.

<u>State regulations</u> Massachusetts New York New Jersey	::	None of the components are listed. None of the components are listed. The following components are listed: Phthalocyanine blue Carbon black
Pennsylvania	:	Titanium dioxide The following components are listed: Phthalocyanine blue
		Carbon black Titanium dioxide

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	:	All components are listed or exempted.
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International regulations

International lists	:	 Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted.
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed
Chemical Weapons Convention	:	Not listed
List Schedule II Chemicals Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

<u>History</u>	
Date of printing :	08/15/2014
Date of issue/Date of revision :	08/13/2014
Date of previous issue :	00/00/0000
Version :	1.0
Key to abbreviations : References :	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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-



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named 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.