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Version Number 1.0 Revision Date 06/11/2015 Page 1 of 14 Print Date 06/12/2015

SAFETY DATA SHEET

BLUE NAVY 5

Section 1. Identification		
GHS product identifier	:	BLUE NAVY 5
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10212534
Product type	:	solid
Relevant identified uses of the subst	ance	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	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure
(with hours of operation)		or accident).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



Version Number 1.0 Revision Date 06/11/2015

Page 2 of 14 Print Date 06/12/2015

Signal word	:	No signal word.
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	:	CC10212534

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	1 - 5	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

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.



Version Number 1.0 Revision Date 06/11/2015	Page 3 of 14 Print Date 06/12/2015
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
Ingestion	 clothing and shoes. Get medical attention if symptoms occur. 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, acu	te and delayed
Potential acute health effects	
Eye contact Inhalation	 No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact Ingestion	No known significant effects or critical hazards.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 atten	ntion 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.
	National Sector For Formula States State

Protection of first-aiders

Specific treatments

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

No specific treatment.

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Version Number 1.0 Revision Date 06/11/2015 Page 4 of 14 Print Date 06/12/2015

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 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

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Version Number 1.0 Revision Date 06/11/2015

Page 5 of 14 Print Date 06/12/2015

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

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
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Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

POLYONE CORPORATION



SAFETY DATA SHEET **BLUE NAVY 5**

Version Number 1.0 Revision Date 06/11/2015		Page 6 of 14 Print Date 06/12/2015
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures Eye/face protection	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the
Skin protection		following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
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
Odor	: Faint odor.

olyOne

Version Number 1.0 Revision Date 06/11/2015

Page 7 of 14 Print Date 06/12/2015

Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	Not available.
Flash point	Not available.
Burning time	Not available.
Burning rate	: Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower and upper explosive	: Lower: Not available.
(flammable) limits	Upper: Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility	Not available.
Solubility in water	: insoluble in water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	Dynamic: Not available.
-	Kinematic: Not available.

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.



Version Number 1.0 Revision Date 06/11/2015

Page 8 of 14 Print Date 06/12/2015

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species		Dose	Exposure
Carbon black		•			· •
	LD50 Oral	Rat		15,400 mg/kg	-
Conclusion/Summary	:	Mixture.Not fully t	ested.	¥_¥	·
Irritation/Corrosion					
Conclusion/Summary					
Skin	:	Mixture.Not fully t	ested.		
Eyes		Mixture.Not fully t			
Respiratory		Mixture.Not fully t	ested.		
Sensitization					
Conclusion/Summary					
Skin	:	Mixture.Not fully t	ested.		
Respiratory	:	Mixture.Not fully t	ested.		
Mutagenicity					
Conclusion/Summary	:	Mixture.Not fully t	ested.		
Carcinogenicity					
Conclusion/Summary Classification	:	Mixture.Not fully t	ested.		
Product/ingredient	OSHA	IARC	NTP		
name	OSIIA	IAKC	1111		
Carbon black		2B			
Reproductive toxicity					
~					
Conclusion/Summary	:	Mixture.Not fully t	ested.		
Teratogenicity					
Conclusion/Summary	:	Mixture.Not fully t	ested.		
Specific target organ toxici Not available.	ty (single expo	<u>sure)</u>			

<u>olyOne</u>

Version Number 1.0 Revision Date 06/11/2015

Page 9 of 14 Print Date 06/12/2015

Not available.	
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 haza Serious effects may be delayed following exposure.
Skin contact	: No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.
Symptoms related to the physical, ch	nemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	
	: No specific data.
Skin contact	No specific data.No specific data.
Skin contact Ingestion	: No specific data.
Skin contact Ingestion	No specific data.No specific data.
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u>	 No specific data. No specific data. Iso chronic effects from short and long term exposure
Skin contact Ingestion <u>Delayed and immediate effects and a</u>	 No specific data. No specific data. Iso chronic effects from short and long term exposure
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u> Potential immediate effects	 No specific data. No specific data. Iso chronic effects from short and long term exposure : Not available.
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u> Potential immediate effects Potential delayed effects	 No specific data. No specific data. Iso chronic effects from short and long term exposure : Not available.
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u> Potential immediate effects Potential delayed effects <u>Long term exposure</u>	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available.
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u> Potential immediate effects Potential delayed effects <u>Long term exposure</u> Potential immediate effects	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available. Not available.
Skin contact Ingestion <u>Delayed and immediate effects and a</u> <u>Short term exposure</u> Potential immediate effects Potential delayed effects <u>Long term exposure</u> Potential immediate effects Potential delayed effects	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available. Not available.
Skin contact Ingestion Delayed and immediate effects and a Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available. Not available. Not available.
Skin contact Ingestion Delayed and immediate effects and a Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Conclusion/Summary	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available. Not available. Not available. In the state of
Skin contact Ingestion Delayed and immediate effects and a Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Conclusion/Summary General Carcinogenicity Mutagenicity	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. Not available. Not available. Not available. Not available. Mixture.Not fully tested. No known significant effects or critical hazards.
Skin contact Ingestion Delayed and immediate effects and a Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential delayed effects Conclusion/Summary General Carcinogenicity	 No specific data. No specific data. Ilso chronic effects from short and long term exposure Not available. 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.

<u>vOne</u>

Version Number 1.0 Revision Date 06/11/2015 Page 10 of 14 Print Date 06/12/2015

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
Carbon black			
	Acute EC50 37.563 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Water flea	
	Acute LC50 61.547 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Water flea	
BLUE NAVY 5			
Remarks - Acute - Aquatic	Chemicals are not readily available	ble as they are bound within th	e polymer matrix.
invertebrates.:		-	
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.		
Persistence and degradability	_	eadily available as they are bou	and within the
Conclusion/Summary	polymer matrix.		
Conclusion/Summary	: Chemicals are not repolymer matrix.	eadily available as they are bou	ind within the
Bioaccumulative potential <u>Mobility in soil</u>			
Soil/water partition coefficie (KOC)	ent : Not available.		
Other adverse effects	: No known significar	nt effects or critical hazards.	

Section 13. Disposal considerations

Version Number 1.0	Page 11 of 14
Revision Date 06/11/2015	Print Date 06/12/2015

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.
ICAO/IATA	:	Not classified as dangerous good under transport regulations.
IMO/IMDG (maritime)	:	Not classified as dangerous good under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	 United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed
	United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not



Version Number 1.0	Page 12 of 14
Revision Date 06/11/2015	Print Date 06/12/2015

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) : 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)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Carbon black	1 - 5	СН

<u>SARA 313</u>

Not applicable.

POLYONE CORPORATION



SAFETY DATA SHEET **BLUE NAVY 5**

Version Number 1.0		
Revision Date 0	6/11/2015	

Page 13 of 14 Print Date 06/12/2015

<u>State regulations</u> Massachusetts	:	The following components are listed: Calcium carbonate Carbon black Silica, amorphous, precipitated and gel
New York New Jersey	:	None of the components are listed. The following components are listed: Phthalocyanine blue Calcium carbonate Carbon black
Pennsylvania	:	Silica, amorphous, precipitated and gel The following components are listed: Phthalocyanine blue
		Calcium carbonate
		Carbon black
		Silica, amorphous, precipitated and gel
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.
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 Chemical Weapons Convention List Schedule II Chemicals	:	Not listed

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Version Number 1.0 Revision Date 06/11/2015

Page 14 of 14 Print Date 06/12/2015

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Section 16. Other information

<u>History</u>	
Date of printing :	06/12/2015
Date of issue/Date of revision :	06/11/2015
Date of previous issue :	00/00/0000
Version :	1.0
	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 IMDG = 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

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