GRAY

Version Number 1.0 Revision Date 11/13/2015

ne

Page 1 of 14 Print Date 11/14/2015

SAFETY DATA SHEET

GRAY

Section 1. Identification		
GHS product identifier	:	GRAY
Chemical name		Mixture
CAS number	:	Mixture
Other means of identification	:	CC10229480
Product type	:	solid
<u>Relevant identified uses of the sub</u> Product use	stance :	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).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 th product. This SDS should be retained and available for employees an other users of this product.

Classification of the substance or : Not classified. **mixture**

GHS label elements

GRAY

Version Number 1.0 Revision Date 11/13/2015



Page 2 of 14 Print Date 11/14/2015

Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
<u>I recautionary statements</u>		
General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.

None known.

Section 3. Composition/information on ingredients

:

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10229480

CAS number/other identifiers

Hazards not otherwise classified

Ingredient name	%	CAS number
Carbon black	0.1 - 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

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.
Inhalation	:	Get medical attention if irritation occurs. Remove victim to fresh air and keep at rest in a position comfortable

GRAY



Version Number 1.0 Revision Date 11/13/2015	Page 3 of 14 Print Date 11/14/2015
Skin contact : Ingestion :	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. Flush contaminated skin with plenty of water. Remove contaminated 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, acute	and delayed
Potential acute health effects	
Eye contact:Inhalation:Skin contact:Ingestion:	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.
Over-exposure signs/symptoms	
Eye contact:Inhalation:Skin contact:Ingestion:	No specific data. No specific data. No specific data. No specific data.
Indication of immediate medical attenti	on 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

SAFETY DATA SHEET

GRAY



Version Number 1.0	Page 4 of 14 Print Date 11/14/2015
Revision Date 11/13/2015	Plint Date 11/14/2015

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	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any 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

GRAY

Version Number 1.0 Revision Date 11/13/2015

<u>PolyOne</u>

Page 5 of 14 Print Date 11/14/2015

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

Appropriate engineering controls

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

GRAY



Version Number 1.0 Revision Date 11/13/2015		Page 6 of 14 Print Date 11/14/2015
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 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	: GREY	•
Odor	: Faint of	odor.

GRAY

Version Numbe	er 1.0
Revision Date	11/13/2015

<u>PolyOne</u>

Page 7 of 14 Print Date 11/14/2015

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.

GRAY

Version Number 1.0 Revision Date 11/13/2015

Page 8 of 14 Print Date 11/14/2015

PolyOne.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species		Dose	Exposure
Carbon black		, î			•
	LD50 Oral	Rat		15,400 mg/kg	-
Conclusion/Summary	: Mi	xture.Not fully	tested.		
Irritation/Corrosion					
Conclusion/Summary					
Skin	: Mi	xture.Not fully	tested.		
Eyes		xture.Not fully			
Respiratory	: Mi	xture.Not fully	tested.		
<u>Sensitization</u>					
Conclusion/Summary					
Skin		xture.Not fully			
Respiratory	: Mi	xture.Not fully	testea.		
Mutagenicity					
Conclusion/Summary	: Mi	xture.Not fully	tested.		
Carcinogenicity					
Conclusion/Summary Classification	: Mi	xture.Not fully	tested.		
Product/ingredient	OSHA	IARC	NTP		
name					
Carbon black		2B			
<u>Reproductive toxicity</u>					
Conclusion/Summary	: Mi	xture.Not fully	tested.		
Teratogenicity					
Conclusion/Summary	: Mi	xture.Not fully	tested.		
Specific target organ toxicit Not available.	ty (single exposu	<u>·e)</u>			

GRAY

PolyOne.

Version Number 1.0 Revision Date 11/13/2015	Page 9 of 14 Print Date 11/14/2015
<u>Specific target organ toxicity (repea</u> Not available.	ted exposure)
<u>Aspiration hazard</u> Not available.	
Information on the likely routes of exposure	: Not available.
Potential acute health effects	
Eye contact Inhalation	 No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard.
Skin contact Ingestion	 Serious effects may be delayed following exposure. No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical, ch	emical and toxicological characteristics
Eye contact Inhalation Skin contact Ingestion	 No specific data. No specific data. No specific data. No specific data.
-	lso chronic effects from short and long term exposure
Delayed and minediate effects and a	iso chrome effects from short and long term exposure
Short term exposure	
Potential immediate effects Potential delayed effects	Not available.Not available.
Long term exposure	
Potential immediate effects Potential delayed effects	Not available.Not available.
Potential chronic health effects	
Conclusion/Summary	: Mixture.Not fully tested.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects	 No known significant effects or critical hazards.

GRAY

Version Number 1.0 Revision Date 11/13/2015

Page 10 of 14 Print Date 11/14/2015

P<u>olyOne</u>

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		Daphnia	
	Acute LC50 61	.547 mg/l Fresh	Aquatic invertebrates.	48 h
	water		Daphnia	
GRAY				
Remarks - Acute - Aquatic	Chemicals are	not readily available as	s they are bound within the	polymer matrix.
invertebrates.:				
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.			nd within the
Persistence and degradability	<u>/</u>			
Conclusion/Summary		emicals are not readily	y available as they are bou	nd within the
Conclusion/Summary		emicals are not readily lymer matrix.	y available as they are bou	nd within the
Bioaccumulative potential <u>Mobility in soil</u>				
Soil/water partition coefficie (KOC)	ent : No	ot available.		
Other adverse effects	: No) known significant eff	fects or critical hazards.	

Section 13. Disposal considerations

GRAY

ŀ	olyOne	
_		

Version Number 1.0	Page 11 of 14
Revision Date 11/13/2015	Print Date 11/14/2015

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 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) - Preliminary assessment report

GRAY



Version Number 1.0		Page 12 of 14	
Revision Date 11/13/2015		Print Date 11/14/2015	
		 (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 - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Zinc sulfide Chromium (III) oxide 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	
Clean Air Act Section 602 Class II Substances	:	Not listed	
DEA List I Chemicals (Precursor Chemicals)	:	Not listed	
DEA List II Chemicals (Essential Chemicals)	:	Not listed	
US. EPA CERCLA Hazardous Subs	tanco	es (40 CFR 302)	

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Carbon black	0.1 - 1	СН

SARA 313

Product name	CAS number	%
10/11		

GRAY

Pol	lyOne

Version Number 1.0 Revision Date 11/13/2015

Page 13 of 14 Print Date 11/14/2015

Form R - Reporting requirements	Zinc sulfide	1314-98-3	10 - 30
Supplier notification	Zinc sulfide	1314-98-3	10 - 30
SARA 313 notifications mus include copying and redistrib			
State regulations			
Massachusetts		components are listed.	
New York	: None of the	components are listed.	
New Jersey	: The followin Zinc sulfide	g components are listed:	

The following components are listed: Zinc sulfide

Pennsy	lvania
I CHIISY	vama

Carbon black

Carbon black

<u>California Prop. 65</u> 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): All components are listed or exempted. 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 List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention	:	Not listed

GRAY

Version Number 1.0 Revision Date 11/13/2015



Page 14 of 14 Print Date 11/14/2015

List Schedule III Chemicals

Section 16. Other information

History		
Date of printing	:	11/14/2015
Date of issue/Date of revision	:	11/13/2015
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 $73/78$ = International Convention for the Prevention of Pollution
		From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		UN = United Nations
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.