#### **GREY 1**

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# SAFETY DATA SHEET

#### **GREY 1**

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification Product type	::	GREY 1 Mixture Mixture CC10280229 liquid
<u>Relevant identified uses of the subs</u> Product use	stance :	or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	<b>POLYONE CORPORATION</b> ColorMatrix Group Inc. 680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA
		+1 216 622 0100
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. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. 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**

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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	:	CC10280229

#### CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	25 - 50	13463-67-7
Carbon black	1 - 3	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

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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
Skin contact	:	for breathing. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

		cioning and shoes. Our incurcar attention in 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 Ingestion Over-exposure signs/symptoms	: : :	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical atte	<u>ntio</u>	n and special treatment needed, if necessary
Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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. Firefighting measures

#### Extinguishing media

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Suitable extinguishing media	In case of fire, use water spray (fog), foam, dry chemical or $CO_2$ .
	None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal	Decomposition products may include the following materials:
decomposition products	carbon dioxide
	carbon monoxide metal oxide/oxides
	inetal 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 containme	ent a	nd cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material
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e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). 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**

Ingredient name	Exposure limits
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

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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.
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.

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**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	:	liquid [liquid]
Color	:	GREY
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
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	-	<b>Dynamic:</b> 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

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Conditions to avoid Incompatible materials	:	not occur. Keep away from extreme heat and oxidizing agents. Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure			
Carbon black							
	LD50 Oral	Rat	15,400 mg/kg	-			
<b>Remarks - Inhalation:</b>	No applicable toxic	No applicable toxicity data					
Remarks - Dermal:	No applicable toxi	No applicable toxicity data					
Titanium dioxide							
Remarks - Oral:	No applicable toxic	city data					
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h			
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-			
Conclusion/Summary	: Mixtu	re.Not fully tested					

Conclusion/Summary

**Irritation/Corrosion** 

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				
<b>Conclusion/Summary</b>					
Skin	: N	lixture.Not ful	ly tested.		
Eyes	: N	lixture.Not ful	ly tested.		
Respiratory	: N	lixture.Not ful	ly tested.		
<u>Sensitization</u>					
Conclusion/Summary					
Conclusion/Summary Skin	: N	lixture.Not ful	ly tested.		

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Conclusion/Summary	:	Mixture.Not ful	ly tested.
<b>Carcinogenicity</b>			
Conclusion/Summary <u>Classification</u>	:	Mixture.Not ful	ly tested.
Product/ingredient name	OSHA	IARC	NTP
Carbon black		2B	
Titanium dioxide		2B	
<u>Reproductive toxicity</u>			
<b>Conclusion/Summary</b>	:	Mixture.Not ful	ly tested.
<b>Teratogenicity</b>			
<b>Conclusion/Summary</b>	:	Mixture.Not ful	ly tested.
Specific target organ toxicity Not available.			
Specific target organ toxicity Not available.	<u>repeated e</u>	exposure)	
Aspiration hazard Not available.			
Information on likely routes exposure	of :	Not available.	
Potential acute health effects			
Eye contact	:	No known signi	ficant effects or critical hazards.
Inhalation	:		ficant effects or critical hazards.
Skin contact	:		ficant effects or critical hazards.
Ingestion	:	No known signi	ficant effects or critical hazards.
Symptoms related to the physical sector of th	sical, chemi	cal and toxicolog	ical characteristics
Eye contact	:	No specific data	L.
Inhalation	:	No specific data	L.
Skin contact	:	No specific data	
Ingestion	:	No specific data	

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#### 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 Carcinogenicity	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity Teratogenicity	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects Fertility effects	:	No known significant effects or critical hazards. 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			
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:			
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Remarks - Chronic - Fish:	No applicable toxicity data							
Remarks - Chronic -	No applicable toxicity data							
Aquatic invertebrates.:	No applicable toxicity data							
Titanium dioxide								
	Acute LC50 > 1,000 Mg/l Marine	Fish - Fish	96 h					
	water		<b>70 II</b>					
Remarks - Acute - Fish:	Acute							
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates.	48 h					
		Crustaceans						
Remarks - Acute - Aquatic	Acute	1						
invertebrates.:								
	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates.	48 h					
	C C	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.:								
<b>Conclusion/Summary</b>	: Not available.							
Persistence and degradability	<u>/</u>							
Constant Sector Sector	No. 1.1.1.							
Conclusion/Summary	: Not available.							
<b>Bioaccumulative potential</b>								
Not available.								
<u>Mobility in soil</u>								
Soil/water partition coefficie	ent : Not available.							
(KOC)		<u>.</u>						
Other adverse effects	<ul> <li>No known significant e</li> </ul>	effects or critical hazards.						

# Section 13. Disposal considerations

<b>Disposal methods</b> : The generation of waste should be avoided or minimized wherev possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environment protection and waste disposal legislation and any regional local	ts ntal
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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 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	:	Not classified as dangerous goods under transport regulations.

# Section 15. Regulatory information

U.S. Federal regulations	: United States - TSCA 12(b) - Chemical export 1	notification: None
	of the components are listed.	
	United States - TSCA 4(a) - Final Test Rules: 1	Not listed
	United States - TSCA 4(a) - ITC Priority list: 1	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 n	ew use rules: Not
	listed	
	United States - TSCA 5(a)2 - Proposed significa	int new use rules:
	Not listed	
	United States - TSCA 5(e) - Substances consent	order: Not listed
	United States - TSCA 6 - Final risk managemen	nt: Not listed
	United States - TSCA 6 - Proposed risk manage	ement: Not listed
	United States - TSCA 8(a) - Chemical risk rules	S: Not listed
	United States - TSCA 8(a) - Dioxin/Furane pred	cusor: Not listed

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	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: Not listed
	United States - EPA Clean water act (CWA) section 311 -
	Hazardous substances: Not listed
	United States - EPA Clean air act (CAA) section 112 - Accidental
	release prevention - Flammable substances: Not listed
	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		
<b>DEA List I Chemicals (Precursor</b>	:	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 - 3	СН
Titanium dioxide	25 - 50	СН

#### SARA 313

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Not applicable.

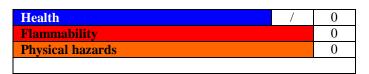
<u>State regulations</u> Massachusetts New York New Jersey Pennsylvania	::	None of the components are listed. None of the components are listed. The following components are listed: Carbon black White mineral oil (petroleum) Calcium carbonate Titanium dioxide The following components are listed:
i chiisyivania	•	Aluminum hydroxide
		Carbon black
		Calcium carbonate
		Titanium dioxide
<u>California Prop. 65</u> WARNING: This product contains a c	hemi	cal known to the State of California to cause cancer.
United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
International regulations		
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Europe inventory	:	All components are listed or exempted.
Japan	:	Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	Not determined. Not determined.
Turkey United States	:	
United States	:	All components are listed or exempted.



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## **Section 16. Other information**

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



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

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:	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 Air Transport As
:	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.

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