MATERIAL SAFETY DATA SHEET CHOCOLATE

Version Number 1.1 Revision Date 03/23/2014 Page 1 of 8 Print Date 3/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	CHOCOLATE
Product code	:	CC10143060
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Titanium dioxide	13463-67-7	0.1 - 1
Carbon black	1333-86-4	5 - 10
Iron oxide	1309-37-1	5 - 10
Calcium carbonate	1317-65-3	10 - 30
Rutile, antimony chromium buff	68186-90-3	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

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.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.



MATERIAL SAFETY DATA SHEET CHOCOLATE

Version Number 1.1 Revision Date 03/23/2014 Page 2 of 8 Print Date 3/31/2014

	Experience shows no unusual dermatitis hazard from routine handling.			
Chronic exposure	: Refer to Section 11 for Toxicological Information.			
Medical Conditions Aggravated by Exposure:	: None known.			
	4. FIRST AID MEASURES			
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases o doubt seek medical advice.			
Ingestion	: Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.			
Eyes	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.			
Skin	: Wash off with soap and plenty of water. If skin irritation persists seek medical attention.			
	5. FIREFIGHTING MEASURES			
Flash point	: not applicable			
Flash point Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	 not applicable not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. 			
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature	 not applicable not applicable not applicable carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne 			
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive 			
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen 			
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. 			
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. 6. ACCIDENTAL RELEASE MEASURES Wear appropriate personal protection during cleanup, such as 			

PolyOne.

MATERIAL SAFETY DATA SHEET **CHOCOLATE**

Version Number 1.1 Revision Date 03/23/2014 Page 3 of 8 Print Date 3/31/2014

Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.
Storage		Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing
Additional Protective Measures	:	Safety shoes
General Hygiene Considerations	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.

PolyOne.

MATERIAL SAFETY DATA SHEET **CHOCOLATE**

Version Number 1.1 Revision Date 03/23/2014 Page 4 of 8 Print Date 3/31/2014

Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Carbon black	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Iron oxide	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

PolyOne

MATERIAL SAFETY DATA SHEET CHOCOLATE

Version Number 1.1 Revision Date 03/23/2014

Page 5 of 8 Print Date 3/31/2014

9. PHYSICAL AND CHEMICAL PROPERTIES						
Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility	 solid pellets BROWN very faint Not determined not applicable insoluble 	Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH	Not establishednot applicable			
	10. STABILITY AN	D REACTIVITY				
Stability	: The product is stab	ble if stored and handled as	prescribed.			
Hazardous Polymerization	: Will not occur.					
Conditions to avoid	: Keep away from o decomposition, do	xidizing agents and open fla not overheat.	ame. To avoid thermal			
Incompatible Materials	: Incompatible with	strong acids and oxidizing	agents.			
Hazardous decomposition products		O2), carbon monoxide (CO dous materials, and smoke	· · ·			

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.

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory
			system.
68186-90-3	Rutile, antimony	Irritant	Eyes, Skin, Respiratory
	chromium buff		system.

LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

	CAS-No.	Chemical Name	Route	Value	Species
Γ	1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
			Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity

MATERIAL SAFETY DATA SHEET **CHOCOLATE**

Version Number 1.1 Revision Date 03/23/2014 Page 6 of 8 Print Date 3/31/2014

This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
13463-67-7	Titanium dioxide	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

12. ECOLOGICAL INFORMATION

: Not readily biodegradable.
: Chemicals are not readily available as they are bound within the polymer matrix.
: Chemicals are not readily available as they are bound within the polymer matrix.
: no data available
13. DISPOSAL CONSIDERATIONS
: Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
-

POLYONE CORPORATION



MATERIAL SAFETY DATA SHEET CHOCOLATE

sion Number 1.1 ision Date 03/23/2014				Print Date	Page 7 3/31/
		and disposal in acc l and local regulation		applicable fed	eral,
	14. TRANSPOR	T INFORMATIC	DN		
U.S. DOT Classification	: Not regulated f	for transportation.			
ICAO/IATA	: Refer to specif	ic regulation.			
IMO/IMDG (maritime)	: Refer to specif	ic regulation.			
	15. REGULATO	RY INFORMATI	ON		
US Regulations:					
OSHA Status	: Classified as ha	azardous based on	components.		
TSCA Status	: All componen TSCA Inventor	ts of this product a ry.	re listed on or	r exempt from	the
US. EPA CERCLA Hazardo	us Substances (40 CFR	302)			
not applicable					
California Proposition 65	n : Not applicable				
SARA Title III Section 302 I	Extremely Hazardous S	ubstance			
Unless specific chemicals are	e identified under this s	ection, this product	t is Not Appli	icable under th	is regul
SARA Title III Section 313	Foxic Chemicals:				
Unless specific chemicals are Chemical Name	e identified under this s	ection, this product CAS-N		icable under th Veight percent	is regul
CHROMIUM III COMPO COMPOUNDSANTIMON COMPOUNDSCHROMIU	NΥ	I 68186-9	90-3 10	0.00 - 30.00	
Canadian Regulations:					
	lease Inventory (NPRI)				
Chemical Name		CAS-No.	Weight percent	NPRI	ID#

MATERIAL SAFETY DATA SHEET CHOCOLATE

Version Number 1.1 Revision Date 03/23/2014

Page 8 of 8 Print Date 3/31/2014

utile, antimony chromium buff			68186-90-3	10.00 - 30.00	
WHMIS Classification WHMIS Ingredient Dis CAS-No. 1333-86-4 1309-37-1 68186-90-3		re List	pants of this product	are on the Canadian	Domestic
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.			
ional Inventories:		T to a			
Australia AICS	:	Listed			
China IECS	:	Listed			
Europe EINECS	:	Listed			
Japan ENCS	:	Listed			
Korea KECI	:	Listed			
Philippines PICCS	:	Listed			
		16 07110	R INFORMATION		

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.