MATERIAL SAFETY DATA SHEET Onflex-V 1170A-0100 Black

Version Number 1.0 Revision Date 12/12/2006

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	Onflex-V 1170A-0100 Black
Product code	:	EM10008024
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1
Carbon black	1333-86-4	1 - 5
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	1 - 5
Zinc oxide	1314-13-2	1 - 5
Zinc stearate	557-05-1	1 - 5

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 Ingestion Eyes Skin	 Particulates, like other inert materials can be mechanically irritating. May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritating. Experience shows no unusual dermatitis hazard from routine handling.

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Medical Conditions : None known.				
Aggravated by Exposure:				
	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 of 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 seel medical attention.			
	5. FIRE-FIGHTING MEASURES			
Flash point	: Not applicable			
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable Not applicable Not applicable Carbon dioxide blanket, water spray, dry powder, foamnone. 			
Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 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			
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.			
Environmental precautions	: Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.			
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods.			
	7. HANDLING AND STORAGE			

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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. EXPOSU	UR	E 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.
Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):	Total dust. as carbon black	ACGIH
	3.5 mg/m3	PEL:	Total dust. as carbon black	OSHA Z1
Petroleum distillates, solvent-refined heavy paraffinic	500 ppm 2,000 mg/m3	PEL:	Vapor.	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL
Zinc oxide	10 mg/m3	Time Weighted Average (TWA):	Total dust. as Zn	ACGIH
	5 mg/m3	PEL:	Respirable dust. as Zn	OSHA Z1
	15 mg/m3	PEL:	Total dust. as Zn	OSHA Z1
	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	10 mg/m3	Short Term Exposure Limit (STEL):	Respirable fraction.	ACGIH
Zinc stearate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	as stearates	ACGIH
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility

Pellets, Slabs
BLACK
Very faint
Not determined
Not applicable
Insoluble

: Solid

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pH Not applicable
Not determined
Not established
Not applicable
Not applicable
Not applicable
Not applicable

10. STABILITY AND REACTIVITY

Stability	:	Stable.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Strong acids, oxidizing and reducing agents
Hazardous decomposition	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

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products

(NOx), other hazardous materials, and smoke are all possible.

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.
64741-88-4	Petroleum distillates, solvent-refined heavy paraffinic	Irritant	Eyes, Skin.
1314-13-2	Zinc oxide	Systemic effects	Respiratory system.
557-05-1	Zinc stearate	Systemic effects	Eyes, Skin, Respiratory 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
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
1314-13-2	Zinc oxide	LC50	2500 mg/m3	mouse
		Oral	7,950	mousemouse
		LD50Oral	mg/kg7,950	
		LD50	mg/kg	
557-05-1	Zinc stearate	Oral LD50	> 10 gm/kg	rat

Carcinogenicity

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:

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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

Persistence and degradability		Not readily biodegradable.			
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.				
Bioaccumulation Potential	tential : Chemicals are not readily available as they are bound within the polymer matrix.				
Additional advice : Not applicable					
	1.	3. DISPOSAL CONSIDERATIONS			
Product	:	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.			
Contaminated packaging	:	: Recycling is preferred when possible. The generator of waste materi has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.			
	1	4. TRANSPORT INFORMATION			
U.S. DOT Classification	:	Not regulated for transportation.			
ICAO/IATA (air)	:	Refer to specific regulation.			
IMO / IMDG (maritime)	:	Refer to specific regulation.			
	15	. REGULATORY INFORMATION			
US Regulations:					
US Regulations:					

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OSHA Status :	Classified as hazardous b	based on con	mponents.	
TSCA Status :	All components of this p Inventory.	roduct are l	isted on or exem	pt from the TSCA
US. EPA CERCLA Hazardous Subs	stances (40 CFR 302)			
Not applicable				
California Proposition :	Not applicable			
65				
SADA Title III Section 202 Extrem	aly Hazardaya Substance			
SARA Title III Section 302 Extreme	ery nazardous Substance			
Unless specific chemicals are identi	fied under this section. thi	s product is	Not Applicable	under this regulation
	,	- F		
SARA Title III Section 313 Toxic C	Chemicals:			
Unless specific chemicals are identi	fied under this section, thi			
Chemical Name		CAS-No.	0	
ZINC COMPOUNDS		1314-13-2		
ZINC COMPOUNDS		557-05-1	1.00 -	5.00
Canadian Regulations:				
National Pollutant Release Ir		-		
Chemical Name	CAS-N		Weight %	NPRI ID#
Zinc oxide	1314-1		1.00 - 5.00	231
Zinc stearate	557-05	-1	1.00 - 5.00	231
WIDMC Classification	D24			
WHMIS Classification :	D2A			
WHMIS Ingredient Disclosu	ire List			
CACN				
CAS-No.				
1333-86-4				
1314-13-2				
557-05-1				
DSL :	All components of this p	product area	on the Canadian	Domestic
	Substances List (DSL) of			

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National Inventories:

Australia AICS	: Not determined
China IECS	: Not determined
Europe EINECS	: Not determined
Japan ENCS	: Not determined
Korea KECI	: Not determined
Philippines PICCS	: Not determined

16. OTHER 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.