PolvOne

MATERIAL SAFETY DATA SHEET Onflex-V 1040D-S0010 natural

Version Number 1.0 Revision Date 02/12/2007

Product Use

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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 1040D-S0010 natural
Product code	:	EM10012219
Chemical Name	:	Mixture
CAS-No.	:	Mixture

: Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1
Petroleum distillates, solvent-refined heavy	64741-88-4	1 - 5
paraffinic		
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, Eyes, Skin contact
Acute exposure	
Inhalation Ingestion	Resin particles, like other inert materials, can be mechanically irritating.May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Avoid skin contact. Product contains unreacted organic peroxides which may cause mild skin irritation.

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Medical Conditions : Individuals with chronic respiratory disorders (i.e. asthma, chronic				
Aggravated by Exposure: bronchitis, etc.) may be adversely affected by any airborne contamination				
	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	: Not applicable			
Lower explosion limit	: Not applicable			
Autoignition temperature	: Not relevant			
Suitable extinguishing media	: Carbon dioxide blanket, water spray, dry powder, foam.			
Special Fire Fighting	: Fullface self-contained breathing apparatus (SCBA) used in positive			
Procedures	pressure mode should be worn to prevent inhalation of airborne			
	contaminants.			
Unusual Fire/Explosion Hazards	: 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 12 of this MSDS for proper disposal methods.			

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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. Keep away from heat. Excessive storage temperature and humidity can degrade product performance. Store below 149 °F (65 °C). Rotate stock. Product shelf life is normally 1 year maximum.		
8. EXP	'OSUF	RE CONTROLS / PERSONAL PROTECTION		
Respiratory protection	:	No personal respiratory protective equipment normally required when handling the product itself. See "Engineering Measures" section below for precautions to be taken when heating or processing this material.		
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. During processing and cross-linking, product can give off by-products such as alcohols, acetophenone, alpha-methylstyrene, acetone, methane, and ethane. By-product vapors may be flammable. User must provide necessary precautions such as adequate ventilation to prevent accumulation and ignition of vapors. Adequate ventilation and/or appropriate respiratory protection may also be necessary to minimize employee exposure to processing vapors.		
Exposure limit(s)				

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Components	Value	Exposure time	Exposure type	List:
Petroleum distillates, solvent-refined heavy	500 ppm 2,000	PEL:	Vapor.	OSHA Z1
paraffinic	mg/m3			ACCILI
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

10. STABILITY AND REACTIVITY

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

Hazardous Polymerization

Conditions to avoid

Solid Pellets NO PIGMENT characteristic Not determined Not applicable Insoluble

Will not occur.

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

Stability

: Stable.

:

: Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.

- Incompatible Materials : strong acids, oxidizing agents, reducing agents
- Hazardous decomposition products : Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. Traces of alcohols, acetophenone, alpha-methylstyrene, acetone, methane, ethane, or other byproducts may be liberated during processing or

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decomposition.

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.
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
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.

12. ECOLOGICAL INFORMATION

Persistence and degradability	:	Not readily biodegradable.
Environmental Toxicity	:	Chemicals are not readily available as they are bound within the polymer matrix.

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Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the polymer matrix.
Additional advice	: Not applicable
	13. 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 materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. 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:	
OSHA Status	: Classified as hazardous based on components.
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.
US. EPA CERCLA Hazardou	s Substances (40 CFR 302)
Not applicable	
California Proposition 65	: Not applicable
SARA Title III Section 302 E	xtremely Hazardous Substance

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Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight %
ZINC COMPOUNDS	1314-13-2	0.10 - 1.00
ZINC COMPOUNDS	557-05-1	0.10 - 1.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)	
Chemical Name	CAS-No.

Chemical Name	CAS-No.	Weight %	NPRI ID#
Zinc oxide	1314-13-2	0.10 - 1.00	231
Zinc stearate	557-05-1	0.10 - 1.00	231

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
1314-13-2	
557-05-1	

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	: Not deter	rmined
China IECS	: Not deter	rmined
Europe EINECS	: Not deter	rmined
Japan ENCS	: Not deter	rmined
Korea KECI	: Not deter	rmined
Philippines PICCS	: Not deter	mined

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

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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.