MATERIAL SAFETY DATA SHEET

Orange (PE)

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	Orange (PE)
Product code	:	CC10100310
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

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	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to 	
Skin	 Resin particles, fixe other metrimaterials, are meenaneanly inflating to eyes. 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.	



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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 seek medical attention.
		5. FIRE-FIGHTING MEASURES
Flash point	:	Not applicable
F1		
Flammable Limits Upper explosion limit		Not applicable
Lower explosion limit	:	Not applicable
Autoignition temperature	:	Not applicable
Suitable extinguishing media	:	Carbon dioxide blanket, Water spray, Dry powder, Foam.
Special Fire Fighting Procedures	:	Fullface self-contained breathing apparatus (SCBA) used in positive 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. A	CCIDENTAL 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
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



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and contamination. Keep in a dry, cool place.						
8. EXPOSURE CONTROLS / PERSONAL PROTECTION						
Respiratory protection	: N	: No personal respiratory protective equipment normally required.				
Eye/Face Protection	: S	afety glasses with side-shiel	ds			
Hand protection	: P	rotective gloves				
Skin and body protection	: L	ong sleeved clothing				
Additional Protective Measures	: S	afety shoes				
General Hygiene: Handle in accordance with good industrial hygiene and safety practice.ConsiderationsWash 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)						
Components	Value	Exposure time	Exposure type	List:		
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):	as Ti	MX OEL		
	20 mg/m3	Short Term Exposure Limi (STEL):	t as Ti	MX OEL		
	0 DIIVSI	CAL AND CHEMICAL PI	DODEDTIES			
	9. 11130	LAL AND CHEMICAL FI	OFERTIES			
Form	: Solid	l Eva	ooration rate : No	t applicable		
Appearance	: pelle		Specific Gravity : Not determined			
Color	: ORA	NGE Bulk	density : No	t established		
Odour				t applicable		
Melting point/range		-		t applicable		
Boiling Point:		applicable pH	: No	t applicable		
Water solubility : Insoluble						
10. STABILITY AND REACTIVITY						
Stability	: S	table.				
Hazardous Polymerization	n : W	/ill not occur.				
Conditions to avoid	: К	eep away from oxidizing ag	ents and open flame. To	avoid thermal		
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	decomposition,	do not overheat.				
Incompatible Materials	: Incompatible w	ith strong acids and o	xidizing agents.			
Hazardous decomposition products						
	11. TOXICOLOGIO	CAL INFORMATIC	DN			
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. <u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:						
CAS-No.	Chemical Name	Effect	Target (Organ		
	itanium dioxide	Systemic effects	Respiratory syste	<u> </u>		
CAS-No. 13463-67-7 Ti				NTP 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 degradabil	Persistence and degradability : Not readily biodegradable.					
Environmental Toxicity	Environmental Toxicity : Chemicals are not readily available as they are bound within the polymer matrix.					
Bioaccumulation Potential	: Chemicals are n polymer matrix.	ot readily available a	s they are bound w	rithin the		
Additional advice	Additional advice : No data available					
	13. DISPOSAL C	ONSIDERATIONS				

Product

: Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The



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	generator of waste material has the respons classification, transportation and disposal i applicable federal, state/provincial and loca	n accordance with
Contaminated packaging	: Recycling is preferred when possible. The has the responsibility for proper waste clas and disposal in accordance with applicable and local regulations.	sification, transportation
	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 component	nts.
TSCA Status	: All components of this product are listed or Inventory.	n or exempt from the TSCA
US. EPA CERCLA Hazardous	Substances (40 CFR 302)	
Not applicable		
California Proposition 65	: Not applicable	
SARA Title III Section 302 Ex	remely Hazardous Substance	
Unless specific chemicals are i	entified under this section, this product is Not A	pplicable under this regulat
SARA Title III Section 313 To	ic Chemicals:	
Unless specific chemicals are i	entified under this section, this product is Not A	pplicable under this regulat
Canadian Regulations:		



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National Pollutant Release Inventory (NPRI)					
Not applicable					
WHMIS Classification : D2A					
	ts of this product are on the Canadian Domestic tt (DSL) or are exempt.				
National Inventories:					
Australia AICS : Listed					
China IECS : Listed					
Europe EINECS : Not determine	d				
Japan ENCS : Not determine	d				
Korea KECI : Listed					
Philippines PICCS : Listed					
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.