MATERIAL SAFETY DATA SHEET VIVID ORANGE

Version Number 1.1 Revision Date 03/13/2014

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POLYONE CORPORAT 33587 Walker Road, Avo		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	:	VIVID ORANGE
Product code	:	CC10149899
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use		Industrial Applications

Components CAS-No. Weight percent

Titanium dioxide	13463-67-7	1 - 5
Rutile, antimony chromium buff	68186-90-3	30 - 60
		•

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 enduser (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.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.

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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 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 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
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	 not applicable not applicable not applicable 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. 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.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.

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Storage

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

8. EXPOSURE 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.
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Exposure limit(s)

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Components	Value	Exposure time	Exposure type	List:
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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	
Appearance	
Colour	
Odour	
Melting point/range	
Boiling Point:	
Water solubility	

:	solid
:	pellets
:	ORANGE
:	very faint
:	Not determined
:	not applicable
:	insoluble
:	Not determined not applicable

Evapouration rate Specific Gravity:Not determinedBulk density:Not established Bulk densityI to communicationVapour pressure: not applicableVapour density: not applicable pH

- : Not applicable
- not applicable :

10. STABILITY AND REACTIVITY

Stability	:	The product is stable if stored and handled as prescribed.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

11. TOXICOLOGICAL INFORMATION

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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.	
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.	

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 polymer matrix.	n the
Bioaccumulation Potential	Chemicals are not readily available as they are bound within polymer matrix.	n the
Additional advice	no data available	
	13. DISPOSAL CONSIDERATIONS	
Product	Like most thermoplastic plastics the product can be recycled possible recycling is preferred to disposal or incineration. T generator of waste material has the responsibility for proper classification, transportation and disposal in accordance wit applicable federal, state/provincial and local regulations.	The waste
Contaminated packaging	Recycling is preferred when possible. The generator of was material has the responsibility for proper waste classificatio transportation and disposal in accordance with applicable fe	n,

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	state/prov	vincial and local regulation	ons.		
	14. TRANS	SPORT INFORMATIC	DN		
U.S. DOT Classification	: Not regu	lated for transportation.			
ICAO/IATA	: Refer to	specific regulation.			
IMO/IMDG (maritime)	: Refer to	specific regulation.			
	15. REGUL	ATORY INFORMATI	ON		
US Regulations:					
OSHA Status	: Classifie	d as hazardous based on	components.		
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.				
US. EPA CERCLA Hazardo	us Substances (40) CFR 302)			
not applicable					
California Proposition 65	n : Not appli	icable			
SARA Title III Section 302 I	Extremely Hazard	lous Substance			
Unless specific chemicals are	e identified under	this section, this product	t is Not Applicable	under this regul	
Unless specific chemicals are	e identified under	this section, this product	t is Not Applicable	under this regul	
Unless specific chemicals are SARA Title III Section 313		-	t is Not Applicable	under this regul	
SARA Title III Section 313 T Unless specific chemicals are	Foxic Chemicals:	this section, this product	t is Not Applicable	under this regula	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name	Foxic Chemicals: e identified under	this section, this product	t is Not Applicable	under this regulate	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO COMPOUNDSANTIMON	Foxic Chemicals: e identified under UNDSCHROMI NY	this section, this product CAS-N UM III 68186-9	t is Not Applicable	under this regula	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO	Foxic Chemicals: e identified under UNDSCHROMI NY	this section, this product CAS-N UM III 68186-9	t is Not Applicable	under this regulate	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO COMPOUNDSANTIMON	Foxic Chemicals: e identified under UNDSCHROMI NY	this section, this product CAS-N UM III 68186-9	t is Not Applicable	under this regulate	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO COMPOUNDSANTIMON COMPOUNDSCHROMIU Canadian Regulations: National Pollutant Re	Foxic Chemicals: e identified under UNDSCHROMI NY JM COMPOUNI	this section, this product CAS-N UM III 68186-9 DS	t is Not Applicable No. Weight 90-3 30.00	under this regula t percent - 60.00	
SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO COMPOUNDSANTIMON COMPOUNDSCHROMIU	Foxic Chemicals: e identified under UNDSCHROMI NY JM COMPOUNI	this section, this product CAS-N UM III 68186-9 DS	t is Not Applicable	under this regulate	

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WHMIS Classification	:	D2A	
WHMIS Ingredient Discl	osu	re List	
CAS-No. 68186-90-3			
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.	
National Inventories:			
Australia AICS	:	Listed	
China IECS	:	Listed	
Europe EINECS	:	Listed	
Japan ENCS	:	Not determined	
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.