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SAFETY DATA SHEET

ORANGE

Section 1. Identification GHS product identifier ORANGE Chemical name : Mixture **CAS number** Mixture : CC10197431 Other means of identification : **Product type** • solid Relevant identified uses of the substance or mixture and uses advised against **Product use** Industrial applications. Plastics. : POLYONE CORPORATION **Supplier's details** : 33587 Walker Road, Avon Lake, OH 44012 1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure **Emergency telephone number** or accident).CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, (with hours of operation) exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions.After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.

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Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.

: None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10197431

CAS number/other identifiers

Hazards not otherwise classified

Ingredient name	%	CAS number
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters,	10 - 30	68515-48-0
C9-rich		
Titanium dioxide	1 - 5	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the

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		upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects		
Eye contact Inhalation	:	No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical atte	ntio	n and special treatment needed, if necessary
Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 . None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	May emit Hydrogen Chloride (HCl). Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containn	nent a	nd cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and

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place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

:

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Titanium dioxide	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust
	OSHA PEL (1993-06-30)
	PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust
	NIOSH REL (1994-06-01)
	ACGIH TLV (1996-05-18)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 10 mg/m3

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Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures		
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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Section 9. Physical and chemical properties

Appearance

Physical state	:	solid
Color	:	ORANGE
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	•	Lower: Not available.
zower and apper emprosite	•	
(flammable) limits	•	Upper: Not available.
	:	
(flammable) limits	:	Upper: Not available.
(flammable) limits Vapor pressure	:	Upper: Not available. Not available.
(flammable) limits Vapor pressure Vapor density	:	Upper: Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density	:	Upper: Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility		Upper: Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water	:	Upper: Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n-		Upper: Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.Under normal conditions of storage

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and use, hazardous decomposition products should not be produced.

Section 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.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,2-Benzenedicarboxylic acid,	di-C8-10-branched a	alkyl esters, C9-rich		
	LD50 Oral	Rat	10,000 mg/kg	-
TT' 1 11 11			•	

Titanium dioxide

Conclusion/Summary

Mixture.Not fully tested.

:

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Benzenedicarboxylic	Eyes - Mild	Rabbit			-
acid, di-C8-10-branched	irritant				
alkyl esters, C9-rich					
Conclusion/Summary					
Skin			fully tested.		
Eyes			fully tested.		
Respiratory	: N	lixture.Not	fully tested.		
Sensitization					
Conclusion/Summary					
Skin			fully tested.		
Respiratory	: N	lixture.Not	fully tested.		
Mutagenicity					
Conclusion/Summary	: N	lixture.Not	fully tested.		
Carcinogenicity					
Conclusion/Summary	: N	lixture.Not	fully tested.		
<u>Classification</u>			•		
Product/ingredient name	OSHA		IARC	N	ГР
Titanium dioxide			2B		

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<u>Reproductive toxicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
<u>Teratogenicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (single Not available.	exp	<u>osure)</u>
Specific target organ toxicity (repea Not available.	ted o	exposure)
<u>Aspiration hazard</u> Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact Inhalation	:	No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the physical, ch	emi	cal and toxicological characteristics
Eye contact Inhalation Skin contact Ingestion	::	No specific data. No specific data. No specific data. No specific data.
Delayed and immediate effects and a	lso o	chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		

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Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ORANGE		. =	· •
Remarks - Acute - Aquatic invertebrates.:	Chemicals are	ot readily available as they are bound wi	thin the polymer matrix.
Conclusion/Summary		emicals are not readily available as they ymer matrix.	are bound within the
Persistence and degradability	<u>/</u>		
Conclusion/Summary		emicals are not readily available as they ymer matrix.	are bound within the
Conclusion/Summary		emicals are not readily available as they ymer matrix.	are bound within the

Bioaccumulative potential				
Product/ingredient name	LogPow	BCF	Potential	
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1,2-Benzenedicarboxylic	8.8	3.00	high
acid, di-C8-10-branched			
alkyl esters, C9-rich			
Titanium dioxide		352.00	high

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	:	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and
		contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	Consult mode specific transport rules
IMO/IMDG (maritime)	:	Consult mode specific transport rules
Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.'

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Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: None of the components are listed. United States - TSCA 4(a) - Final Test Rules: Listed 1,2- Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich
		United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed
		United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
		United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR):
		Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Zinc stearate Vinyl chloride monomer
		United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I Substances Clean Air Act Section 602 Class II	:	Not listed
Substances	•	

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DEA List I Chemicals (Precursor	:	Not listed
Chemicals)		
DEA List II Chemicals (Essential	:	Not listed
Chemicals)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable. :

Composition/information on ingredients

Name	%	Classification
1,2-Benzenedicarboxylic acid, di-	10 - 30	AH
C8-10-branched alkyl esters, C9-		
rich		
Titanium dioxide	1 - 5	СН

<u>SARA 313</u>

Not applicable.

State regulations

Massachusetts	: The following components are listed:
	Calcium carbonate
	Titanium dioxide
New York	: None of the components are listed.
New Jersey	: The following components are listed:
-	Calcium carbonate
	Ethene, chloro-, homopolymer
	Titanium dioxide
Pennsylvania	: The following components are listed:
·	Calcium carbonate
	Titanium dioxide

<u>California Prop. 65</u> WARNING: This product contains a chemical known to the State of California to cause cancer.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.

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International regulations

International lists	:	 Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: Please contact your supplier for information on the inventory status of this material. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted.
Chemical Weapons Convention List Schedule I Chemicals	:	Not listed
Chemical Weapons Convention List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

<u>History</u>		
Date of printing	:	04/23/2014
Date of issue/Date of revision	:	04/16/2014
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate
		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL 73/78 = International Convention for the Prevention of Pollution
		From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
		UN = United Nations
References	:	Not available.

Notice to reader

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