ne.

Version Number 1.1 Revision Date 03/20/2015 Page 1 of 15 Print Date 03/21/2015

SAFETY DATA SHEET

GREEN 13670

Section 1. Identification	on	
		ODEEN 12/70
GHS product identifier	:	GREEN 13670
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10174671
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	tance :	or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION
		33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

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. 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.
Supplemental label elements Hazards not otherwise classified	:	None known. None known.

vOne

Version Number 1.1 Revision Date 03/20/2015 Page 2 of 15 Print Date 03/21/2015

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10174671

CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	10 - 30	68515-48-0
Chrome yellow (Lead chromate pigment)	10 - 30	1344-37-2
Titanium dioxide	5 - 10	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 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.
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



Version Number 1.1 Revision Date 03/20/2015 Page 3 of 15 Print Date 03/21/2015

medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	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 attention and special treatment needed, if necessary

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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)

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 $\rm CO_2$. 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 halogenated compounds metal oxide/oxides



SAFETY DATA SHEET **GREEN 13670**

Version Number 1.1	Page 4 of 15
Revision Date 03/20/2015	Print Date 03/21/2015

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 containment	nt ar	d cleaning up
Small spill Large spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Move containers from spill area. Prevent entry into sewers, water
5		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	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where this
hygiene		material is handled, stored and processed. Workers should wash hands
		and face before eating, drinking and smoking. Remove contaminated



SAFETY DATA SHEET GREEN 13670

Version Number 1.1 Revision Date 03/20/2015 Page 5 of 15 Print Date 03/21/2015

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
Chrome yellow (Lead chromate pigment)	OSHA PEL (2006-11-27) Calculated as Cr
	PEL: Permissible Exposure Level 0.005 mg/m3
	NIOSH REL (2010-09-01) Calculated as Cr
	Time Weighted Average (TWA) 0.0002 mg/m3
	OSHA PEL 1989 (1989-03-01) Calculated as Pb
	PEL: Permissible Exposure Level 0.075 mg/m3
	ACGIH TLV (1995-05-23) Calculated as Pb
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 0.05 mg/m3
	ACGIH TLV (1994-09-01) Calculated as Cr
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 0.05 mg/m3
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
	ACGIH TLV (1996-05-18)
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:
	Permissible Exposure Level 10 mg/m3
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
	5/15



SAFETY DATA SHEET **GREEN 13670**

Version Number 1.1 Revision Date 03/20/2015 Page 6 of 15 Print Date 03/21/2015

Individual protection measures		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.
Hygiene measures Eye/face protection	:	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. 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
Body protection	:	if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be
Other skin protection	:	approved by a specialist before handling this product. 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
Respiratory protection	:	product. 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.

Section 9. Physical and chemical properties

Appearance

Physical state	solid [Pellets.]	
Color	: GREEN	
Odor	: Faint odor.	
Odor threshold	: Not available.	
рН	: Not available.	



SAFETY DATA SHEET **GREEN 13670**

Version Number	er 1.1
Revision Date	03/20/2015

Page 7 of 15 Print Date 03/21/2015

Melting point Boiling point Flash point Burning time Burning rate Evaporation rate Flammability (solid, gas)	: : : : : : : : : : : : : : : : : : : :	Not available. Not available. Not available. Not available. Not available. Not available.
Lower and upper explosive (flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water	:	Lower: Not available. Upper: Not available. Not available. Not available. Not available. Not available. insoluble in water.
Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature SADT Viscosity	:	Not available. Not available. Not available. Not available. Dynamic: Not available. Kinematic: 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.

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



Version Number 1.1 Revision Date 03/20/2015

Page 8 of 15 Print Date 03/21/2015

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,2-Benzenedicarboxylic acid,	di-C8-10-branched	alkyl esters, C9-rich		
	LD50 Oral	Rat	10,000 mg/kg	-
Chrome yellow (Lead chromat	e pigment)	·		
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		

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		lixture.Not fu	•		
Eyes		lixture.Not fu			
Respiratory	: N	lixture.Not fu	lly tested.		
<u>Sensitization</u>					
Conclusion/Summary					
Skin		lixture.Not fu			
Respiratory	: N	lixture.Not fu	lly tested.		
<u>Mutagenicity</u>					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
<u>Carcinogenicity</u>					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
<u>Classification</u>			5		
Product/ingredient	OSHA	IARC	NTP		
name					
Chrome yellow (Lead	+	1	Known	to be a human carci	nogen.Reasonably
chromate pigment)			anticipa	ted to be a human c	arcinogen.
Titanium dioxide		2B			

Conclusion/Summary Mixture.Not fully tested. :

<u>PolyOne</u>.

Version Number 1.1 Revision Date 03/20/2015 Page 9 of 15 Print Date 03/21/2015

<u>Teratogenicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (single Not available.	<u>exp</u>	<u>osure)</u>
Specific target organ toxicity (repeated Not available.	ted o	exposure)
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the physical, ch	<u>1emi</u>	cal and toxicological characteristics
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Delayed and immediate effects and a	also o	chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effects		



Version Number 1.1 Revision Date 03/20/2015

Page 10 of 15 Print Date 03/21/2015

Conclusion/Summary

General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects

·

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Mummichog	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh	Fish - Fathead minnow	96 h
	water		
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates.	48 h
		Water flea	
	Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Water flea	
GREEN 13670			
Remarks - Acute - Aquatic	Chemicals are not readily available a	s they are bound within the	e polymer matrix.
invertebrates.:		-	
Conclusion/Summary	: Chemicals are not readil	ly available as they are bou	nd within the

Mixture.Not fully tested.

No known significant effects or critical hazards.

:

:

:

:

:

:

:

polymer matrix.

Persistence and degradability



SAFETY DATA SHEET GREEN 13670

Version Number 1.1	Page 11 of 15
Revision Date 03/20/2015	Print Date 03/21/2015

Conclusion/Summary	:	Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	:	Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,2-Benzenedicarboxylic	8.8	3.00	low
acid, di-C8-10-branched			
alkyl esters, C9-rich			
Chrome yellow (Lead		3,600.00	high
chromate pigment)			_
Titanium dioxide		352.00	low

<u>Mobility in soil</u>

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



Version Number 1.1 Revision Date 03/20/2015 Page 12 of 15 Print Date 03/21/2015

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	Not classified as dangerous good under transport regulations.
IMO/IMDG (maritime)	:	Not classified as dangerous good under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: The following components are listed: Chrome yellow (Lead chromate pigment)
		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 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Listed Chrome yellow (Lead chromate pigment)
		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(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 Chrome yellow (Lead chromate pigment) Zinc ferrite brown spinel (C.I. Pigment Yellow 119) Zinc stearate Phthalocyanine green Nickel Vinyl chloride monomer

)<u>ne</u>.

SAFETY DATA SHEET GREEN 13670

Version Number 1.1	Page 13 of 15
Revision Date 03/20/2015	Print Date 03/21/2015

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)	:	Listed
Hazardous Air Pollutants (HAPs)		
Clean Air Act Section 602 Class I	:	Not listed
Substances		
Clean Air Act Section 602 Class II	:	Not listed
Substances		
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- C8-10-branched alkyl esters, C9- rich	10 - 30	АН
Chrome yellow (Lead chromate pigment)	10 - 30	СН
Titanium dioxide	5 - 10	СН

SARA 313

	Product name	CAS number	%
Form R - Reporting	Chrome yellow (Lead	1344-37-2	0
requirements	chromate pigment)		
Supplier notification	Chrome yellow (Lead	1344-37-2	0
chromate pigment)			
SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall			

<u>lyOne</u>

Version Number	er 1.1
Revision Date	03/20/2015

include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

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:
		Ethene, chloro-, homopolymer
		Calcium carbonate
		Chrome yellow (Lead chromate pigment)
		Titanium dioxide
Pennsylvania	:	The following components are listed:
		Calcium carbonate
		Chrome yellow (Lead chromate pigment)

Titanium dioxide

<u>California Prop. 65</u>

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	All components are listed or exempted.
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: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. 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

/Une

Version Number 1.1 Revision Date 03/20/2015

Page 15 of 15 Print Date 03/21/2015

Chemical Weapons Convention	:	Not listed
List Schedule II Chemicals		
Chemical Weapons Convention	:	Not listed
List Schedule III Chemicals		

Section 16. Other information

<u>History</u>		
Date of printing	:	03/21/2015
Date of issue/Date of revision	:	03/20/2015
Date of previous issue	:	01/09/2013
Version	:	1.1
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 = Internediate 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

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.