

LIME GREEN

Version Number 1.0 Revision Date 08/10/2016

Page 1 of 16 Print Date 08/11/2016

SAFETY DATA SHEET

LIME GREEN

Section 1. Identification

GHS product identifier LIME GREEN **Chemical name** Mixture **CAS** number Mixture Other means of identification CC10237014 **Product type** liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use Industrial applications. Plastics.

POLYONE CORPORATION Supplier's details

ColorMatrix Group Inc.

680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA

+1 216 622 0100

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 for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

SKIN CORROSION/IRRITATION - Category 2

GHS label elements



LIME GREEN

Version Number 1.0 Page 2 of 16 Revision Date 08/10/2016 Print Date 08/11/2016

Hazard pictograms

 \diamondsuit

Signal word : Warning

Hazard statements : Causes skin irritation.

Precautionary statements

General : Not applicable.

Prevention: Wear protective gloves. Wash hands thoroughly after handling.Response: IF ON SKIN: Wash with plenty of soap and water. Take off

contaminated clothing and wash it before reuse. If skin irritation

occurs: Get medical attention.

Storage:Not applicable.Disposal:Not applicable.Supplemental label elements:None known.Hazards not otherwise classified:None known.

Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: CC10237014

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	10 - 25	13463-67-7
Miscellaneous Compounds Distillates, petroleum, hydrotreated	10 - 25	Not available.
middle		

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.



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 3 of 16 Print Date 08/11/2016

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. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable

for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie,

belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms



LIME GREEN

Version Number 1.0 Page 4 of 16 Revision Date 08/10/2016 Print Date 08/11/2016

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Indication of immediate medical attention 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. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

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 CO_2 .

: None known.

Specific hazards arising from the chemical

cnemical Hazardous thermal

decomposition products

In a fire or if heated, a pressure increase will occur and the container

may burst.

: 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-figl

Fire-fighters should wear appropriate protective equipment and self-



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016

For non-emergency personnel

Page 5 of 16 Print Date 08/11/2016

fire-fighters

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

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is

inadequate. Put on appropriate personal protective equipment. For emergency responders

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".

Avoid dispersal of spilled material and runoff and contact with soil, **Environmental precautions**

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 and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Dilute with

water and mop up if water-soluble. Alternatively, or if water-

insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal

contractor.

Large spill Stop leak if without risk. Move containers from spill area. Approach

> release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency

contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling



LIME GREEN	
Version Number 1.0	Page 6 of 16
Revision Date 08/10/2016	Print Date 08/11/2016

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

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
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle	

Appropriate engineering controls

Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 7 of 16 Print Date 08/11/2016

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: chemical splash goggles.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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, air-purifying or air-fed 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



LIME GREEN

Version Number 1.0 Page 8 of 16 Revision Date 08/10/2016 Print Date 08/11/2016

Appearance

Physical state liquid [liquid] Color **GREEN** Odor Faint odor. **Odor threshold** Not available. Not available. pН **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. (flammable) limits : Upper: Not available.

Vapor pressure: Not available.Vapor density: Not available.Relative density: Not available.Solubility: Not available.Solubility in water: insoluble in water.

Partition coefficient: n-

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : 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.

Not available.

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 : Keep away from strong acids.

Oxidizer.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition

products should not be produced.



LIME GREEN

Version Number 1.0 Page 9 of 16 Revision Date 08/10/2016 Print Date 08/11/2016

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
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Miscellaneous Compounds Distillates, petroleum, hydrotreated middle				

Conclusion/Summary: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				

Conclusion/Summary

Skin: Mixture.Not fully tested.Eyes: Mixture.Not fully tested.Respiratory: Mixture.Not fully tested.

Sensitization

Conclusion/Summary

SkinMixture.Not fully tested.RespiratoryMixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Product/ingredient	OSHA	IARC	NTP
name			
Titanium dioxide		2B	



LIME GREEN

 Version Number 1.0
 Page 10 of 16

 Revision Date 08/10/2016
 Print Date 08/11/2016

Reproductive toxicity

Conclusion/Summary : Mixture. Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Miscellaneous Compounds Distillates, petroleum,	ASPIRATION HAZARD - Category 1
hydrotreated middle	

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 : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

10/16



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 11 of 16 Print Date 08/11/2016

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : 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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (dusts and mists)	6.751 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Fish	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh	Fish - Fish	96 h
	water		
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates.	48 h



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 12 of 16 Print Date 08/11/2016

	Crustaceans	
Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates.	48 h
	Crustaceans	
Acute LC50 11 mg/l Fresh water	Aquatic invertebrates.	48 h
	Crustaceans	
Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates.	48 h
	Crustaceans	
Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates.	48 h
	Daphnia	
Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates.	48 h
	Daphnia	
Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h
water	Daphnia	

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient

(KOC)

Other adverse effects

Not available.

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The g

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 13 of 16 Print Date 08/11/2016

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 : 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: None

of the components are listed.

United States - TSCA 4(a) - Final Test Rules: Not listed
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 Titanium dioxide

United States - EPA Clean water act (CWA) section 311 -



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016

Page 14 of 16 Print Date 08/11/2016

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)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

DEA List II Chemicals (Essential

Chemicals)

Not listed

Not listed

Not listed Not listed

Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Classification
Miscellaneous Compounds	10 - 25	AH
Distillates, petroleum,		
hydrotreated middle		

SARA 313

	Product name	CAS number	%
Form R - Reporting	Titanium dioxide	13463-67-7	10 - 25
requirements			
Supplier notification	Titanium dioxide	13463-67-7	10 - 25

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations



LIME GREEN

Version Number 1.0 Page 15 of 16 Revision Date 08/10/2016 Print Date 08/11/2016

Massachusetts : The following components are listed:

Titanium dioxide

New York : None of the components are listed.

New Jersey : The following components are listed:

Titanium dioxide

Pennsylvania : The following components are listed:

Titanium dioxide

California Prop. 65

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 : All components are listed or exempted.

International regulations

International lists : Australia inventory (AICS): Not determined.

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): Not determined. Philippines inventory (PICCS): All components are listed or

exempted.

Chemical Weapons Convention

List Schedule I Chemicals

Chemical Weapons Convention

List Schedule II Chemicals

Chemical Weapons Convention

List Schedule III Chemicals

Not listed

Not listed

: Not listed

Section 16. Other information

History

Date of printing: 08/11/2016Date of issue/Date of revision: 08/10/2016Date 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



LIME GREEN

Version Number 1.0 Revision Date 08/10/2016 Page 16 of 16 Print Date 08/11/2016

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

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.