

# TW PEARL GREEN

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# SAFETY DATA SHEET

#### TW PEARL GREEN

# **Section 1. Identification**

**GHS product identifier** : TW PEARL GREEN

Chemical name: MixtureCAS number: MixtureOther means of identification: CC10235111Product type: liquid

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

Product use : Industrial applications. Plastics.

Supplier's details : POLYONE CORPORATION

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



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Hazard pictograms

❖

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: CC10235111

#### **CAS** number/other identifiers

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

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.



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# 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



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**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

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

may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

Special protective actions for firefighters : 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 selfcontained breathing apparatus (SCBA) with a full face-piece operated



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in positive pressure mode.

# Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : 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

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 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 non-combustible, 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

**Protective measures**: Put on appropriate personal protective equipment (see Section 8). Do



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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.

: Eating, drinking and smoking should be prohibited in areas where this

not ingest. Avoid contact with eyes, skin and clothing. Avoid

# 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** : G

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



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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.

Personal protective equipment for the body should be selected based **Body protection** 

on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures Other skin protection

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



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#### **Appearance**

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

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

Partition coefficient: n-Not available.

octanol/water

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

**Dynamic:** Not available. Viscosity

**Kinematic:** Not available.

# Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or

its ingredients.

Stable under recommended storage and handling conditions (see **Chemical stability** 

Section 7).

Under normal conditions of storage and use, hazardous reactions will Possibility of hazardous reactions

Conditions to avoid Keep away from extreme heat and oxidizing agents.

**Incompatible materials** Keep away from strong acids.

Oxidizer.

Under normal conditions of storage and use, hazardous decomposition **Hazardous decomposition** products

products should not be produced.



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# 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	



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**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.



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**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)	7.338 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



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	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 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



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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:** Not listed

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

Hazardous substances: Not listed



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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

Not listed

Clean Air Act Section 112(b)

**Hazardous Air Pollutants (HAPs)** 

Clean Air Act Section 602 Class I : Not listed

**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

# 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**

Not applicable.

**State regulations** 

Massachusetts : The following components are listed:

Mica

Titanium dioxide

New York : None of the components are listed.
New Jersey : The following components are listed:

Mica

Titanium dioxide

**Pennsylvania** : The following components are listed:

Titanium dioxide



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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): 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** 

**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: 04/20/2016Date of issue/Date of revision: 04/19/2016Date 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

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)



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UN = United Nations

**References** : Not available.

#### Notice to reader

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