MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

ne

Page 1 of 19 Print Date 11/19/2018

SAFETY DATA SHEET

MED GREEN 2

| Section 1. Identification | n | |
|--|------------|--|
| | | |
| GHS product identifier | : | MED GREEN 2 |
| Chemical name | : | Mixture |
| CAS number | : | Mixture |
| Other means of identification | : | CC10274013 |
| Product type | : | solid |
| <u>Relevant identified uses of the subs</u> Product use | tance : | e 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 SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
|--|---|--|
| Classification of the substance or mixture | : | Not classified. |
| GHS label elements | | |
| Signal word | : | No signal word. |
| | | 1/19 |

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

Page 2 of 19 Print Date 11/19/2018

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. |
| Hazards not otherwise classified | : | None known. |

Section 3. Composition/information on ingredients

:

| Substance/mixture | : | Mixture |
|-------------------------------|---|------------|
| Chemical name | : | Mixture |
| Other means of identification | : | CC10274013 |

CAS number/other identifiers

| % | CAS number |
|---------|-------------------------|
| 1 - 3 | 105-60-2 |
| | |
| 1 - 3 | 1314-13-2 |
| | |
| 1 - 3 | 13463-67-7 |
| | |
| 0 - 0.3 | 1333-86-4 |
| | |
| | 1 - 3 1 - 3 1 - 3 |

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

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

PolyOne

Page 3 of 19 Print Date 11/19/2018

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. 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

| 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. |
| 0 | | |

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 | : | 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. |

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018 Page 4 of 19 Print Date 11/19/2018

PolyOne.

See toxicological information (Section 11)

Section 5. Firefighting 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 | : | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides 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 specialized 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 containme | ent a | nd cleaning up |
| Small spill | : | Move containers from spill area. Vacuum or sweep up material and |

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

PolyOne

Page 5 of 19 Print Date 11/19/2018

Large spill

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 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 |
|-----------------|---|
| Carbon black | OSHA PEL 1989 (1989-03-01) |
| | PEL: Permissible Exposure Level 3.5 mg/m3 |
| | OSHA PEL (1993-06-30) |
| | PEL: Permissible Exposure Level 3.5 mg/m3 |
| | NIOSH REL (1994-06-01) |
| | Time Weighted Average (TWA) 3.5 mg/m3 |
| | Time Weighted Average (TWA) |
| | ACGIH TLV (2010-12-06) |
| | TLV-TWA: Threshold Limit Value - Time weighted average PEL: |
| | · · · · |

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018



Page 6 of 19 Print Date 11/19/2018

| | Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction |
|-------------|---|
| Caprolactam | OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 1 mg/m3 Form: Dust Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 3 mg/m3 Form: Dust PEL: Permissible Exposure Level 20 mg/m3 5 ppmForm: Vapor Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 40 mg/m3 10 ppmForm: Vapor NIOSH REL (1994-06-01) Time Weighted Average (TWA) 1 mg/m3 Form: Dust Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 3 mg/m3 Form: Dust Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 3 mg/m3 Form: Dust Time Weighted Average (TWA) 1 mg/m3 0.22 ppmForm: Vapor Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 3 mg/m3 0.66 ppmForm: Vapor ACGIH TLV (2003-01-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 5 mg/m3 Form: Inhalable fraction and vapor |
| Zinc oxide | OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 5 mg/m3 Form: Fume Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 10 mg/m3 Form: Fume PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Total dust PEL: Permissible Exposure Level 5 mg/m3 Form: Respirable fraction NIOSH REL (1994-06-01) Time Weighted Average (TWA) 5 mg/m3 Form: Dust and fumes Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 10 mg/m3 Form: Fume Ceiling-A concentration that should not be exceeded at any time during any part of the working day. 15 mg/m3 Form: Dust |



Version Number 1.1 Revision Date 04/17/2018



| 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 Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Environmental exposure controls : Environmental exposure controls : Hygiene 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 contaminanted clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Eye/face protection : Safety eyewar 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 safety glasses with side-shields. Skin protection : Chemical-resistant, impervious gloves complying with an approved trend derived bactel barreneous bot differences and proved | | ACGIH TLV (2003-01-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 2 mg/m3 Form: Respirable fraction TLV-STEL: Threshold Limit Value - Short Time Exposure Level 10 mg/m3 Form: Respirable fraction OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 5 mg/m3 Form: Fume |
|--|--------------------------------|---|
| TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3Appropriate 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:Eye/face protection:Safety eyewar complying with an approvedSkin protection:Skin protection:Skin protection:Chemical-resistant, impervious gloves complying with an approved | Titanium dioxide | PEL: Permissible Exposure Level 10 mg/m3 Form: Total dustOSHA PEL (1993-06-30)PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust |
| Environmental exposure controlsexposure 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: | | TLV-TWA: Threshold Limit Value - Time weighted average PEL: |
| 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: Chemical-resistant, impervious gloves complying with an approved | | exposure to airborne contaminants. 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 |
| Eve/face protectionproducts, 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:Chemical-resistant, impervious gloves complying with an approved | Individual protection measures | |
| 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:Chemical-resistant, impervious gloves complying with an approved | | 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. |
| Hand protection : Chemical-resistant, impervious gloves complying with an approved | | 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 |
| | Skin protection | |
| if a risk assessment indicates this is necessary. 7/19 | Hand protection | standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |



MED GREEN 2

| Version Number 1.1 Revision Date 04/17/2018 | | Page 8 of 19 Print Date 11/19/2018 |
|--|---|---|
| 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 | : | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

Section 9. Physical and chemical properties

Appearance

| Physical state | : | solid [Pellets.] |
|--|---|---------------------------|
| Color | - | GREEN |
| Odor | | Faint odor. |
| Odor threshold | - | Not available. |
| pH | : | 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. |
| (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 | : | Not available. |
| Auto-ignition temperature | : | Not available. |
| Decomposition temperature | : | Not available. |
| SADT | : | Not available. |
| Viscosity | : | Dynamic: Not available. |
| | | Kinematic: Not available. |
| | | |



Version Number 1.1 Revision Date 04/17/2018



Page 9 of 19 Print Date 11/19/2018

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 | : | Keep away from strong acids. Oxidizer. |
| 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

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure | | |
|------------------------------|-----------------------------|-----------------------------|---------------|----------|--|--|
| Carbon black | | | · | | | |
| | LD50 Oral | Rat | 15,400 mg/kg | - | | |
| Remarks - Inhalation: | No applicable toxi | city data | | | | |
| Remarks - Dermal: | No applicable toxi | city data | | | | |
| Caprolactam | | | | | | |
| | LD50 Oral | Rat | 1,210 mg/kg | - | | |
| Remarks - Inhalation: | No applicable toxi | city data | | | | |
| Remarks - Dermal: | No applicable toxi | No applicable toxicity data | | | | |
| Zinc oxide | | | | | | |
| Remarks - Oral: | No applicable toxi | city data | | | | |
| Remarks - Inhalation: | No applicable toxi | city data | | | | |
| Remarks - Dermal: | No applicable toxi | No applicable toxicity data | | | | |
| Titanium dioxide | | | | | | |
| Remarks - Oral: | No applicable toxicity data | | | | | |
| | LC50 Inhalation | Rat - Male | 6.82 Mg/l | 4 h | | |
| | LD50 Dermal | Rabbit | > 5,000 mg/kg | - | | |
| Conclusion/Summary | : Mixtu | re.Not fully tested | 1. | | | |

Conclusion/Summary

Mixture.Not fully tested.

Irritation/Corrosion



MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|------------------------------|-------------|----------------|--------------|----------|-------------|
| Caprolactam | Eyes - | Rabbit | | 24 hrs | - |
| - | Moderate | | | | |
| | irritant | | | | |
| | Skin - Mild | Rabbit | | 24 hrs | - |
| | irritant | | | | |
| Zinc oxide | Eyes - Mild | Rabbit | | 24 hrs | - |
| | irritant | | | | |
| | Skin - Mild | Rabbit | | 24 hrs | - |
| | irritant | | | | |
| Titanium dioxide | Skin - Mild | Human | | 72 hrs | - |
| | irritant | | | | |
| Conclusion/Summary | _ | | | | |
| Skin | | lixture.Not fu | | | |
| Eyes | | lixture.Not fu | | | |
| Respiratory | : N | lixture.Not fu | illy tested. | | |
| Sensitization | | | | | |
| Sensiuzauon | | | | | |
| Conclusion/Summary | | | | | |
| Skin | : N | lixture.Not fu | illy tested. | | |
| Respiratory | | lixture.Not fu | | | |
| J | | | J | | |
| Mutagenicity | | | | | |
| | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | Illy tested. | | |
| Canainaganiaitu | | | | | |
| Carcinogenicity | | | | | |
| Conclusion/Summary | : N | lixture.Not fu | illy tested. | | |
| <u>Classification</u> | • 1, | | | | |
| Product/ingredient | OSHA | IARC | NTP | | |
| name | | | | | |
| Carbon black | | 2B | | | |
| Caprolactam | | 4 | | | |
| Titanium dioxide | | 2B | | | |
| | · | • | | | |
| Reproductive toxicity | | | | | |
| | - | | | | |
| Conclusion/Summary | : N | lixture.Not fu | illy tested. | | |
| Touche cominit | | | | | |
| Teratogenicity | | | | | |
| Conclusion/Summary | | lixture.Not fu | lly tostad | | |
| a one usion/summary | : N | TEXTURE. NOF T | m v tested | | |

10/19

MED GREEN 2

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|---|-----|------|
| _ | | |

Page 11 of 19

Print Date 11/19/2018

Version Number 1.1 Revision Date 04/17/2018

Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. **Aspiration hazard** Not available. Information on likely routes of Not available. exposure Potential acute health effects Eye contact No known significant effects or critical hazards. : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact : Ingestion • No known significant effects or critical hazards. Symptoms related to the physical, chemical 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 as well as chronic effects from short and long-term exposure Short term exposure Not available. **Potential immediate effects** • **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. : No known significant effects or critical hazards. General : Carcinogenicity : No known significant effects or critical hazards.

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018 Page 12 of 19 Print Date 11/19/2018

Mutagenicity:NoTeratogenicity:NoDevelopmental effects:NoFertility effects:No

No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure | | | |
|---------------------------|------------------------------|------------------------|----------|--|--|--|
| Carbon black | | | | | | |
| Remarks - Acute - Fish: | No applicable toxicity data | | | | | |
| | Acute EC50 37.563 Mg/l Fresh | Aquatic invertebrates. | 48 h | | | |
| | water | Daphnia | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| invertebrates.: | | | | | | |
| Remarks - Acute - Aquatic | No applicable toxicity data | | | | | |
| plants: | | | | | | |
| Remarks - Chronic - Fish: | No applicable toxicity data | | | | | |
| Remarks - Chronic - | No applicable toxicity data | | | | | |
| Aquatic invertebrates.: | | | | | | |
| Caprolactam | | | | | | |
| Remarks - Acute - Fish: | No applicable toxicity data | | | | | |
| | Acute EC50 2,430 Mg/l Fresh | Aquatic invertebrates. | 48 h | | | |
| | water | Daphnia | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| invertebrates.: | | | - | | | |
| | Acute EC50 4,550 Mg/l Fresh | Aquatic plants - Algae | 72 h | | | |
| | water | | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| plants: | | | - | | | |
| | Acute NOEC 1,250 Mg/l Fresh | Aquatic plants - Algae | 72 h | | | |
| | water | | | | | |
| Remarks - Acute - Aquatic | Chronic | | | | | |
| plants: | | | | | | |
| Remarks - Chronic - Fish: | No applicable toxicity data | | | | | |
| | | | | | | |

PolyOne



MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018 Page 13 of 19 Print Date 11/19/2018

| Remarks - Chronic - | No applicable toxicity data | | | | | |
|---------------------------|--|------------------------|------|--|--|--|
| Aquatic invertebrates.: | | | | | | |
| Zinc oxide | | | | | | |
| | Acute LC50 1.1 Mg/l Fresh water | Fish - Fish | 96 h | | | |
| Remarks - Acute - Fish: | Acute | ſ | 1 | | | |
| | Acute LC50 0.098 Mg/l Fresh | Aquatic invertebrates. | 48 h | | | |
| | water | Daphnia | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| invertebrates.: | | | | | | |
| | Acute IC50 0.046 Mg/l Fresh water | Aquatic plants - Algae | 72 h | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| plants: | | | | | | |
| | Acute IC50 1.85 Mg/l Marine | Aquatic plants - Algae | 96 h | | | |
| | water | | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| plants: | | | | | | |
| Remarks - Chronic - Fish: | No applicable toxicity data | | | | | |
| Remarks - Chronic - | No applicable toxicity data | | | | | |
| Aquatic invertebrates.: | | | | | | |
| Titanium dioxide | | | | | | |
| | Acute LC50 > 1,000 Mg/l Marine | Fish - Fish | 96 h | | | |
| | water | | | | | |
| Remarks - Acute - Fish: | Acute | | | | | |
| | Acute LC50 3 Mg/l Fresh water | Aquatic invertebrates. | 48 h | | | |
| | | Crustaceans | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| invertebrates.: | | | | | | |
| | Acute LC50 6.5 Mg/l Fresh water | Aquatic invertebrates. | 48 h | | | |
| | | Daphnia | | | | |
| Remarks - Acute - Aquatic | Acute | | | | | |
| invertebrates.: | | | | | | |
| Remarks - Acute - Aquatic | No applicable toxicity data | | | | | |
| plants: | | | | | | |
| Remarks - Chronic - Fish: | No applicable toxicity data | | | | | |
| Remarks - Chronic - | No applicable toxicity data | | | | | |
| Aquatic invertebrates.: | | | | | | |
| MED GREEN 2 | | | | | | |
| Remarks - Acute - Aquatic | Chemicals are not readily available as they are bound within the polymer matrix. | | | | | |
| invertebrates.: | | | | | | |
| Conclusion/Summary | : Chemicals are not readily available as they are bound within the | | | | | |
| polymer matrix. | | | | | | |

Persistence and degradability

MED GREEN 2

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| Version Number 1.1 | Page 14 of 19 |
|--------------------------|--|
| Revision Date 04/17/2018 | Print Date 11/19/2018 |
| | |
| | |
| 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 |
|-----------------------------|--------|-----------|-----------|
| 2H-Azepin-2-one, hexahydro- | 0.12 | - | low |
| Zinc oxide (ZnO) | - | 60,960.00 | 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 49CFR Ground/Air/Water : Not regulated for transportation.



MED GREEN 2

| Version Number 1.1 | Page 15 of 19 |
|--------------------------|-----------------------|
| Revision Date 04/17/2018 | Print Date 11/19/2018 |
| | |

| International Air ICAO/IATA | : | Not classified as dangerous goods under transport regulations. |
|---------------------------------|---|--|
| International Water IMO/IMDG | : | Not classified as dangerous goods under transport regulations. |

Section 15. Regulatory information

| | $\mathbf{U}_{\mathbf{r}}(\mathbf{A},\mathbf{A},\mathbf{C},\mathbf{C},\mathbf{A},\mathbf{C},\mathbf{C},\mathbf{C},\mathbf{C},\mathbf{C},\mathbf{C},\mathbf{C},C$ | |
|--------------------------|---|----------|
| U.S. Federal regulations | : United States - TSCA 12(b) - Chemical export notification: No | one |
| | 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: N | Not |
| | listed | |
| | United States - TSCA 5(a)2 - Proposed significant new use rule | es: |
| | Not listed | _ |
| | United States - TSCA 5(e) - Substances consent order: Not list | ed |
| | United States - TSCA 6 - Final risk management: Not listed | |
| | United States - TSCA 6 - Proposed risk management: Not liste | ed |
| | 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): Listed Bismuth vanadium oxide (BiVO4) | |
| | United States - TSCA 8(c) - Significant adverse reaction (SAR) |): |
| | Not listed | |
| | United States - TSCA 8(d) - Health and safety studies: Not list | ed |
| | United States - EPA Clean water act (CWA) section 307 - Prior | rity |
| | pollutants: Listed Zinc oxide | • |
| | Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, | |
| | brominatedchlorinated | |
| | Phosphoric acid, zinc salt (2:3) | |
| | Zinc stearate | |
| | Copper | |
| | United States - EPA Clean water act (CWA) section 311 - | |
| | Hazardous substances: Not listed | |
| | United States - EPA Clean air act (CAA) section 112 - Acciden | tal |
| | 15/10 | |

15/19

MED GREEN 2

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|---|----|-------|
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Version Number 1.1 Revision Date 04/17/2018 Page 16 of 19 Print Date 11/19/2018

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 | : | 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) | · | Not fisted |

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

| Name | % | Classification |
|------------------|---------|----------------|
| Carbon black | 0 - 0.3 | СН |
| Caprolactam | 1 - 3 | АН |
| Zinc oxide | 1 - 3 | АН |
| Titanium dioxide | 1 - 3 | СН |
| Titanium dioxide | 1 - 3 | СН |

SARA 313

| Product name | CAS number | % |
|------------------------|---|---|
| Bismuth vanadium oxide | 14059-33-7 | 10 - 25 |
| (BiVO4) | | |
| Zinc oxide | 1314-13-2 | 1 - 3 |
| | | |
| Zinc oxide | 1314-13-2 | 1 - 3 |
| | | |
| Bismuth vanadium oxide | 14059-33-7 | 10 - 25 |
| | Bismuth vanadium oxide (BiVO4) Zinc oxide Zinc oxide | Bismuth vanadium oxide (BiVO4)14059-33-7Zinc oxide1314-13-2Zinc oxide1314-13-2 |

MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018

<u>PolyOne</u>

Page 17 of 19

Print Date 11/19/2018

| | (BiVO | / | | |
|---|-------|---|--------------------|--|
| SARA 313 notifications mus include copying and redistrib | | | | edistribution of the SDS shal equently redistributed. |
| State regulations | | | | |
| Massachusetts | : | None of the component | | |
| New York | : | The following compo Caprolactam | onents are listed: | |
| New Jersey | : | The following compo Caprolactam Carbon black Boric acid (H3BO3 Titanium dioxide Zinc oxide | | |
| Pennsylvania | : | The following composition Silica, amorphous | onents are listed: | |
| | | Titanium dioxide | | |
| | | Zinc oxide | | |
| | | Caprolactam | | |
| | | Carbon black | | |

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 | : | Not determined. |
| International regulations | | |
| <u>Inventory list</u> | | |
| Australia | : | Not determined. |
| Canada | : | Not determined. |
| China | : | Not determined. |
| Europe inventory | : | Not determined. |
| Japan | : | Not determined. |
| New Zealand | : | Not determined. |
| Philippines | : | Not determined. |
| Republic of Korea | : | Not determined. |
| | | 17/10 |



MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018 Page 18 of 19 Print Date 11/19/2018

| Taiwan | : | Not determined. |
|---------------|---|--|
| Turkey | : | Not determined. |
| United States | : | All components are listed or exempted. |

Section 16. Other information

Hazardous Material Information System (U.S.A.)

| Health | / | 0 |
|------------------|---|---|
| Flammability | | 0 |
| Physical hazards | | 0 |
| | | |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

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|--------------------------------|---|--|
| Date of printing | : | 11/19/2018 |
| Date of issue/Date of revision | : | 04/17/2018 |
| Date of previous issue | : | 12/04/2017 |
| 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 = Intermediate Bulk Container |
| | | IMDG = International Maritime Dangerous Goods |
| | | LogPow = logarithm of the octanol/water partition coefficient |
| | | MARPOL = 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

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MED GREEN 2

Version Number 1.1 Revision Date 04/17/2018 Page 19 of 19 Print Date 11/19/2018

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.