## MATERIAL SAFETY DATA SHEET **GREEN 390C**

Version Number 1.0 Revision Date 05/30/2007 Page 1 of 6 Print Date 11/29/2011

### 1. PRODUCT AND COMPANY IDENTIFICATION

### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, e | xposure  |
|---|--|
| JREEN 390C  |  |
| C10100650   |  |
| lixture   |  |
| lixture   |  |
| ndustrial Applications                                  |  |
| : (<br>0<br>: C<br>: C<br>: M<br>: M                    | <ul> <li>Product Stewardship (770) 271-5902</li> <li>CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, e or accident).</li> <li>GREEN 390C</li> <li>CC10100650</li> <li>Mixture</li> <li>Mixture</li> <li>Industrial Applications</li> </ul> |

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

| Components        | CAS-No.    | Weight % |
|-------------------|------------|----------|
| Silica, amorphous | 7631-86-9  | 1 - 5    |
| Titanium dioxide  | 13463-67-7 | 10 - 30  |

### **3. HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

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.

### POTENTIAL HEALTH EFFECTS

| <b>Routes of Exposure:</b>                    | : Inhalation, Ingestion, Skin contact  |
|---|--|
| Acute exposure                                |  |
| Inhalation<br>Ingestion<br>Eyes               | <ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Resin particles, like other inert materials, are mechanically irritating to guas</li> </ul> |
| Skin  | eyes.<br>: Experience shows no unusual dermatitis hazard from routine handling.  |
| Chronic exposure                              | : Refer to Section 11 for Toxicological Information.   |
| Medical Conditions<br>Aggravated by Exposure: | : None known.  |



## MATERIAL SAFETY DATA SHEET **GREEN 390C**

Version Number 1.0 Revision Date 05/30/2007 Page 2 of 6 Print Date 11/29/2011

| Inhalation                          | :    | Move to fresh air in case of accidental inhalation of fumes from<br>overheating or combustion. When symptoms persist or in all cases of<br>doubt seek medical advice.               |
|-------------------------------------|------|---|
| Ingestion                           | :    | Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.  |
| Eyes                                | :    | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, seek medical attention.  |
| Skin                                | :    | Wash off with soap and plenty of water. If skin irritation persists seek medical attention.   |
|                                     |      | 5. FIRE-FIGHTING MEASURES   |
| Flash point                         | :    | Not applicable  |
| Flammable Limits                    |      |   |
| Upper explosion limit               |      | Not applicable  |
| Lower explosion limit               | ÷    | Not applicable  |
| Autoignition temperature            | •    | Not applicable  |
| Suitable extinguishing media        | :    | Carbon dioxide blanket, Water spray, Dry powder, Foam.  |
| Special Fire Fighting<br>Procedures | :    | Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.                                    |
| Unusual Fire/Explosion<br>Hazards   | :    | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.  |
|                                     | 6. A | CCIDENTAL RELEASE MEASURES  |
| Personal precautions                | :    | Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.  |
| Environmental precautions           | :    | Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.  |
| Methods for cleaning up             | :    | Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal. Refer to Section 13 of this MSDS for proper disposal methods. |
|                                     |      | 7. HANDLING AND STORAGE   |
| Handling                            | :    | Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.   |
| Storage                             | :    | Keep containers dry and tightly closed to avoid moisture absorption   |

2/6



# MATERIAL SAFETY DATA SHEET **GREEN 390C**

Version Number 1.0 Revision Date 05/30/2007

\_

\_

\_

Page 3 of 6 Print Date 11/29/2011

| 8.1                                     | EXPOSURE   | CONTROLS / PERSONAL  | PROTECTION  |   |  |
|---|--|--|---|---|--|
| Respiratory protection                  | : N  | lo personal respiratory protecti   | ve equipment normally r   | required.   |  |
| Eye/Face Protection                     | : S  | : Safety glasses with side-shields   |   |   |  |
| Hand protection                         | : P  | Protective gloves  |   |   |  |
| Skin and body protection                | : L  | ong sleeved clothing   |   |   |  |
| Additional Protective<br>Measures       | : S  | afety shoes  |   |   |  |
| General Hygiene<br>Considerations       |  | Iandle in accordance with good<br>Vash hands before breaks and a   |   | afety practice.   |  |
| Engineering measures                    |  | Ieat only in areas with appropri<br>ppropriate exhaust ventilation a   |   | Provide   |  |
| Exposure limit(s)                       |  |  |   |   |  |
| Components                              | Value  | Exposure time  | Exposure type   | List:   |  |
| Silica, amorphous                       | 0.8 mg/m3  | 0.8 mg/m3 Time Weighted Average<br>(TWA):  |   | Z3  |  |
|   | 10 mg/m3 Time Weighted Average (TWA):  |  | Inhalable particulate.  | MX OEL  |  |
|   | 10 mg/m3   |  |   |   |  |
|   | 3 mg/m3  |  | Respirable dust.  | MX OEL  |  |
| Titanium dioxide                        |  | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average   | Respirable dust.  | MX OEL<br>ACGIH   |  |
| Titanium dioxide                        | 3 mg/m3  | (TWA):<br>Time Weighted Average<br>(TWA):  | Respirable dust.<br>Total dust.   |   |  |
| Titanium dioxide                        | 3 mg/m3<br>10 mg/m3  | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average<br>(TWA):   |   | ACGIH   |  |
| Titanium dioxide                        | 3 mg/m3<br>10 mg/m3<br>15 mg/m3  | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average<br>(TWA):<br>PEL:<br>Time Weighted Average  | Total dust.   | ACGIH<br>OSHA Z1  |  |
| Titanium dioxide                        | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3  | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average<br>(TWA):<br>PEL:<br>Time Weighted Average<br>(TWA):<br>Short Term Exposure Limit   | Total dust.<br>as Ti<br>as Ti   | ACGIH<br>OSHA Z1<br>MX OEL  |  |
|   | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>9. PHYSIC   | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average<br>(TWA):<br>PEL:<br>Time Weighted Average<br>(TWA):<br>Short Term Exposure Limit<br>(STEL):<br>CAL AND CHEMICAL PRO  | Total dust.<br>as Ti<br>as Ti<br><b>PPERTIES</b>  | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL  |  |
| Form                                    | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>9. PHYSIC<br>: Solid  | (TWA):<br>Time Weighted Average<br>(TWA):<br>Time Weighted Average<br>(TWA):<br>PEL:<br>Time Weighted Average<br>(TWA):<br>Short Term Exposure Limit<br>(STEL):<br>CAL AND CHEMICAL PRO  | Total dust.<br>as Ti<br>as Ti<br>DPERTIES<br>ration rate : Not  | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL  |  |
| Form<br>Appearance                      | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>9. PHYSIC<br>: Solid<br>: pelle   | (TWA):         Time Weighted Average         (TWA):         Time Weighted Average         (TWA):         PEL:         Time Weighted Average         (TWA):         Short Term Exposure Limit         (STEL):   | Total dust.<br>as Ti<br>as Ti<br>DPERTIES<br>ration rate : Not<br>ic Gravity : Not  | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL<br>applicable<br>determined                              |  |
| Titanium dioxide                        | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>9. PHYSIC<br>: Solid<br>: pelle<br>: GRE                                | (TWA):         Time Weighted Average         (TWA):         Time Weighted Average         (TWA):         PEL:         Time Weighted Average         (TWA):         Short Term Exposure Limit         (STEL):         CAL AND CHEMICAL PRO         d       Evapor         ets       Specific         EEN       Bulk d                           | Total dust.<br>as Ti<br>as Ti<br>DPERTIES<br>ration rate : Not<br>ic Gravity : Not<br>ensity : Not  | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL<br>applicable<br>determined<br>established               |  |
| <sup>7</sup> orm<br>Appearance<br>Color | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>9. PHYSIC<br>: Solid<br>: pelle<br>: GRE<br>: Very                      | (TWA):         Time Weighted Average         (TWA):         Time Weighted Average         (TWA):         PEL:         Time Weighted Average         (TWA):         Short Term Exposure Limit         (STEL):         CAL AND CHEMICAL PRO         d       Evapor         ets       Specifi         EN       Bulk d         / faint       Vapou | Total dust.<br>as Ti<br>as Ti<br>DPERTIES<br>ration rate : Not<br>ensity : Not<br>ensity : Not<br>r pressure : Not                        | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL<br>applicable<br>determined                              |  |
| Form<br>Appearance<br>Color<br>Ddour    | 3 mg/m3<br>10 mg/m3<br>15 mg/m3<br>10 mg/m3<br>20 mg/m3<br>20 mg/m3<br>9. PHYSIO<br>: Solid<br>: pelle<br>: GRE<br>: Very<br>: Not | (TWA):         Time Weighted Average         (TWA):         Time Weighted Average         (TWA):         PEL:         Time Weighted Average         (TWA):         Short Term Exposure Limit         (STEL):         CAL AND CHEMICAL PRO         d       Evapor         ets       Specifi         EN       Bulk d         / faint       Vapou | Total dust.<br>as Ti<br>as Ti<br>DPERTIES<br>ration rate : Not<br>ic Gravity : Not<br>ensity : Not<br>r pressure : Not<br>r density : Not | ACGIH<br>OSHA Z1<br>MX OEL<br>MX OEL<br>applicable<br>determined<br>established<br>applicable |  |

**POLYONE CORPORATION** 



### MATERIAL SAFETY DATA SHEET GREEN 390C

Version Number 1.0 Revision Date 05/30/2007

Page 4 of 6 Print Date 11/29/2011

| Stability                        | : | Stable.  |
|----------------------------------|---|--|
| Hazardous Polymerization         | : | Will not occur.  |
| Conditions to avoid              | : | Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.                             |
| Incompatible Materials           | : | Incompatible with strong acids and oxidizing agents.   |
| Hazardous decomposition products | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. |

### 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.

### **Toxicity Overview**

This product contains the following components which in their pure form have the following characteristics:

| CAS-No.    | Chemical Name     | Effect           | Target Organ              |
|------------|-------------------|------------------|---------------------------|
| 7631-86-9  | Silica, amorphous | Irritant         | Eyes, Respiratory system. |
| 13463-67-7 | Titanium dioxide  | Systemic effects | Respiratory system.       |

### LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

| CAS-No.   | Chemical Name     | Route                    | Value                          | Species  |
|-----------|-------------------|--------------------------|--------------------------------|----------|
| 7631-86-9 | Silica, amorphous | Oral<br>LD50Oral<br>LD50 | 15,000<br>mg/kg22,500<br>mg/kg | mouserat |

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| CAS-No.    | Chemical Name    | OSHA | IARC | NTP |
|------------|------------------|------|------|-----|
| 13463-67-7 | Titanium dioxide | no   | 2B   | no  |

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

### **12. ECOLOGICAL INFORMATION**



## MATERIAL SAFETY DATA SHEET **GREEN 390C**

| sion Number 1.0<br>ision Date 05/30/2007 |      | Page 5<br>Print Date 11/29/2  |
|--|------|---|
|  |      |   |
| Persistence and degradability            | :    | Not readily biodegradable.  |
| Environmental Toxicity                   | :    | Chemicals are not readily available as they are bound within the polymer matrix.  |
| Bioaccumulation Potential                | :    | Chemicals are not readily available as they are bound within the polymer matrix.  |
| Additional advice                        | :    | No data available   |
|  | 13   | B. DISPOSAL CONSIDERATIONS  |
| Product                                  | :    | Like most thermoplastic plastics the product can be recycled. Where<br>possible recycling is preferred to disposal or incineration. The<br>generator of waste material has the responsibility for proper waste<br>classification, transportation and disposal in accordance with<br>applicable federal, state/provincial and local regulations. |
| Contaminated packaging                   | :    | Recycling is preferred when possible. The generator of waste materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.   |
|  | 14   | 4. TRANSPORT INFORMATION  |
| U.S. DOT Classification                  |      | Not regulated for transportation.   |
| ICAO/IATA (air)                          | •    | Refer to specific regulation.   |
| IMO / IMDG (maritime)                    |      | Refer to specific regulation.   |
|  |      |   |
|  | 15.  | REGULATORY INFORMATION  |
| US Regulations:                          |      |   |
| OSHA Status                              | :    | Classified as hazardous based on components.  |
| TSCA Status                              | :    | All components of this product are listed on or exempt from the TSCA Inventory.   |
| US. EPA CERCLA Hazardous                 | Subs | tances (40 CFR 302)   |
| Not applicable                           |      |   |
| California Proposition                   | :    | Not applicable  |
|  |      |   |

<u>PolyOne</u>

### MATERIAL SAFETY DATA SHEET **GREEN 390C**

| Version Number 1.0       |            | Page 6 of 6 |
|--------------------------|------------|-------------|
| Revision Date 05/30/2007 | Print Date | 11/29/2011  |

65

\_

| SARA Title III Section 302 Extremely Hazardous Substance Unless specific chemicals are identified under this section, this product is Not Applicable under this regula SARA Title III Section 313 Toxic Chemicals: Unless specific chemicals are identified under this section, this product is Not Applicable under this regula Canadian Regulations: National Pollutant Release Inventory (NPRI) Not applicable WHMIS Classification : D2A WHMIS Ingredient Disclosure List CAS-No. 7631-86-9 DSL : All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt. National Inventories: Australia AICS : Not determined China IECS : Listed Iapan ENCS : Not determined Korea KECI : Not determined Philippines PICCS : Not determined |                               |   |
|---|-------------------------------|---|
| SARA Title III Section 313 Toxic Chemicals:<br>Unless specific chemicals are identified under this section, this product is Not Applicable under this regula<br>Canadian Regulations:<br>National Pollutant Release Inventory (NPRI)<br>Not applicable<br>WHMIS Classification : D2A<br>WHMIS Classification : D2A<br>WHMIS Ingredient Disclosure List<br><u>CAS-No.</u><br>7631-86-9<br>DSL : All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.<br>National Inventories:<br>Australia AICS : Not determined<br>China IECS : Listed<br>Europe EINECS : Listed<br>Japan ENCS : Not determined<br>Korea KECI : Not determined<br>Philippines PICCS : Not determined   | SARA Title III Section 302 E  | xtremely Hazardous Substance  |
| Unless specific chemicals are identified under this section, this product is Not Applicable under this regulations:         National Pollutant Release Inventory (NPRI)         Not applicable         WHMIS Classification       :         D2A         WHMIS Ingredient Disclosure List         CAS-No.         7631-86-9         DSL       :         Australia AICS       :         Australia AICS       :         Listed         Europe EINECS       :         Japan ENCS       :         Not determined         Korea KECI       :         Not determined         Philippines PICCS       :         Not determined  | Unless specific chemicals are | identified under this section, this product is Not Applicable under this regula |
| Unless specific chemicals are identified under this section, this product is Not Applicable under this regulations:         National Pollutant Release Inventory (NPRI)         Not applicable         WHMIS Classification       :         D2A         WHMIS Ingredient Disclosure List         CAS-No.         7631-86-9         DSL       :         Australia AICS       :         Australia AICS       :         Listed         Europe EINECS       :         Japan ENCS       :         Not determined         Korea KECI       :         Not determined         Philippines PICCS       :         Not determined  | SARA Title III Section 313 T  | oxic Chemicals:   |
| Canadian Regulations:<br>National Pollutant Release Inventory (NPRI)<br>Not applicable<br>WHMIS Classification : D2A<br>WHMIS Ingredient Disclosure List<br>CAS-No.<br>7631-86-9<br>DSL CAS-No.<br>7631-86-9<br>DSL : All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.<br>National Inventories:<br>Australia AICS : Not determined<br>China IECS : Listed<br>Europe EINECS : Listed<br>Europe EINECS : Not determined<br>Korea KECI : Not determined<br>Korea KECI : Not determined<br>Korea KECI : Not determined   |                               |   |
| National Pollutant Release Inventory (NPRI)         Not applicable         WHMIS Classification       :         DSL       D2A         DSL       CAS-No.<br>7631-86-9         DSL       All components of this product are on the Canadian Domestic<br>Substances List (DSL) or are exempt.         National Inventories:       Inventories:         Australia AICS       :       Not determined         China IECS       :       Listed         Japan ENCS       :       Not determined         Korea KECI       :       Not determined         Philippines PICCS       :       Not determined  | -                             |   |
| Not applicable       WHMIS Classification       :       D2A         WHMIS Ingredient Discurstricts  | -                             | ease Inventory (NPRI)   |
| WHMIS Classification : D2A         WHMIS Ingredient Discloss         Image: CAS-No.         7631-86-9         DSL         All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:         Australia AICS       intermined         China IECS       intermined         Incope EINECS       intermined         Japan ENCS       intermined         Korea KECI       intermined         Philippines PICCS       intermined  |                               |   |
| CAS-No.   |                               | n : D2A   |
| 7631-86-9         DSL       :       All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:       .         Australia AICS       :       Not determined         China IECS       :       Listed         Europe EINECS       :       Listed         Japan ENCS       :       Not determined         Korea KECI       :       Not determined         Philippines PICCS       :       Not determined  | WHMIS Ingredient Di           | sclosure List   |
| 7631-86-9         DSL       :       All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.         National Inventories:       .         Australia AICS       :       Not determined         China IECS       :       Listed         Europe EINECS       :       Listed         Japan ENCS       :       Not determined         Korea KECI       :       Not determined         Philippines PICCS       :       Not determined  |                               |   |
| National Inventories:       Substances List (DSL) or are exempt.         National Inventories:       Australia AICS       :         Australia AICS       :       Not determined         China IECS       :       Listed         Europe EINECS       :       Listed         Japan ENCS       :       Not determined         Korea KECI       :       Not determined         Philippines PICCS       :       Not determined   |                               |   |
| Australia AICS:Not determinedChina IECS:ListedEurope EINECS:ListedJapan ENCS:Not determinedKorea KECI:Not determinedPhilippines PICCS:Not determined  | DSL                           |   |
| China IECS:ListedEurope EINECS:ListedJapan ENCS:Not determinedKorea KECI:Not determinedPhilippines PICCS:Not determined   | National Inventories:         |   |
| Europe EINECS:ListedJapan ENCS:Not determinedKorea KECI:Not determinedPhilippines PICCS:Not determined  | Australia AICS                | : Not determined  |
| Japan ENCS       : Not determined         Korea KECI       : Not determined         Philippines PICCS       : Not determined  | China IECS                    | : Listed  |
| Korea KECI     : Not determined       Philippines PICCS     : Not determined  | Europe EINECS                 | : Listed  |
| Philippines PICCS : Not determined  | Japan ENCS                    | : Not determined  |
|   | Korea KECI                    | : Not determined  |
| 16. OTHER INFORMATION   | Philippines PICCS             | : Not determined  |
|   |                               | 16. OTHER INFORMATION   |

storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.