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# SAFETY DATA SHEET

### SILCOPAS YELLOW

| Section 1. Identification  |       |   |
|--|-------|---|
| GHS product identifier<br>Chemical name<br>CAS number<br>Other means of identification<br>Product type | :     | SILCOPAS YELLOW<br>Mixture<br>Mixture<br>FO20038750<br>liquid                                 |
| Relevant identified uses of the subs   | tance | or mixture and uses advised against   |
| Product use  | :     | Industrial applications. Plastics.  |
| Supplier's details   | :     | <b>GSDI Specialty Dispersions, Inc.</b><br>1675 Navarre Road SW, Massillon,<br>Ohio USA 44646 |
|  |       | 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 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<br>Communication Standard (29 CFR 1910.1200).While this material is<br>not considered hazardous by the OSHA Hazard Communication<br>Standard (29 CFR 1910.1200), this SDS contains valuable<br>information critical to the safe handling and proper use of the product.<br>This SDS should be retained and available for employees and other<br>users of this product. |
|--|---|---|
| Classification of the substance or mixture | : | Not classified.   |



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### **GHS label elements**

| Signal word<br>Hazard statements | : | No signal word.<br>No known significant effects or critical hazards. |
|----------------------------------|---|--|
| Precautionary statements         |   |  |
| Conoral                          |   | Not applicable   |

| 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 | : | FO20038750 |

CAS number/other identifiers

| Ingredient name  | %     | CAS number |
|------------------|-------|------------|
| Titanium dioxide | 1 - 3 | 13463-67-7 |
|                  |       |            |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

:

### Section 4. First aid measures

Description of necessary first aid measures

Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper



and lower eyelids. Get medical attention immediately. Immediately

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|              |   | flush eyes with plenty of water, occasionally lifting the upper and<br>lower eyelids. Check for and remove any contact lenses. Get medical<br>attention if irritation occurs.  |
|--------------|---|--|
| Inhalation   | : | Move exposed person to fresh air. If not breathing, if breathing is<br>irregular or if respiratory arrest occurs, provide artificial respiration or<br>oxygen by trained personnel. Loosen tight clothing such as a collar,<br>tie, belt or waistband. Get medical attention immediately. Remove<br>victim to fresh air and keep at rest in a position comfortable for<br>breathing. Get medical attention if symptoms occur. In case of<br>inhalation of decomposition products in a fire, symptoms may be<br>delayed. The exposed person may need to be kept under medical<br>surveillance for 48 hours. |
| Skin contact | : | In case of contact, immediately flush skin with plenty of water for at<br>least 15 minutes while removing contaminated clothing and shoes.<br>Wash clothing before reuse. Clean shoes thoroughly before reuse. Get<br>medical attention immediately. Flush contaminated skin with plenty of<br>water. Remove contaminated clothing and shoes. Get medical<br>attention if symptoms occur.  |
| Ingestion    | : | Wash out mouth with water. Do not induce vomiting unless directed<br>to do so by medical personnel. Never give anything by mouth to an<br>unconscious person. Get medical attention immediately. Wash out<br>mouth with water. Remove victim to fresh air and keep at rest in a<br>position comfortable for breathing. If material has been swallowed and<br>the exposed person is conscious, give small quantities of water to<br>drink. Do not induce vomiting unless directed to do so by medical<br>personnel. Get medical attention if symptoms occur.  |

### Most important symptoms/effects, acute and delayed

| Potential acute health effects |   |  |
|--------------------------------|---|--|
| Eye contact                    | : Slightly irritating to the eyes.No known significant effects or critical hazards.   |  |
| Inhalation                     | : Exposure to decomposition products may cause a health hazard.<br>Serious effects may be delayed following exposure.No known<br>significant effects or critical hazards. |  |
| Skin contact                   | : Slightly irritating to the skin.No known significant effects or critical hazards.   |  |
| Ingestion                      | : No known significant effects or critical hazards.No known significant effects or critical hazards.  |  |
| Over-exposure signs/symptoms   |   |  |
| Eye contact                    | : No specific data.   |  |
| Inhalation                     | : No specific data.   |  |
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| 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<br>may be delayed. The exposed person may need to be kept under<br>medical surveillance for 48 hours. In case of inhalation of<br>decomposition products in a fire, symptoms may be delayed. The<br>exposed person may need to be kept under medical surveillance for 48<br>hours. |
|----------------------------|---|--|
| Specific treatments        | : | No specific treatment.   |
| Protection of first-aiders | : | No action shall be taken involving any personal risk or without<br>suitable training. It may be dangerous to the person providing aid to<br>give mouth-to-mouth resuscitation. No action shall be taken involving<br>any personal risk or without suitable training.   |

See toxicological information (Section 11)

## **Section 5. Fire-fighting measures**

### Extinguishing media

| Suitable extinguishing media<br>Unsuitable extinguishing media | : | In case of fire, use water spray (fog), foam, dry chemical or $CO_2$ .<br>In case of fire, use water spray (fog), foam, dry chemical or $CO_2$ .<br>None known.None known.  |
|--|---|---|
| ensure energy include  | • |   |
| Specific hazards arising from the chemical                     | : | In a fire or if heated, a pressure increase will occur and the container<br>may burst. In a fire or if heated, a pressure increase will occur and the<br>container may burst.   |
| Hazardous thermal<br>decomposition products                    | : | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>sulfur oxides<br>halogenated compounds<br>metal oxide/oxidesDecomposition products may include the following<br>materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>sulfur oxides<br>halogenated compounds<br>metal oxide/oxides |



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| Special protective actions for fire-<br>fighters  | : | Promptly isolate the scene by removing all persons from the vicinity<br>of the incident if there is a fire. No action shall be taken involving any<br>personal risk or without suitable training.Promptly isolate the scene by<br>removing all persons from the vicinity of the incident if there is a fire.<br>No action shall be taken involving any personal risk or without<br>suitable training. |
|---|---|---|
| Special protective equipment for<br>fire-fighters | : | Fire-fighters should wear appropriate protective equipment and self-<br>contained breathing apparatus (SCBA) with a full face-piece operated<br>in positive pressure mode.Fire-fighters should wear appropriate<br>protective equipment and self-contained breathing apparatus (SCBA)<br>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<br>For emergency responders | :      | No action shall be taken involving any personal risk or without<br>suitable training. Evacuate surrounding areas. Keep unnecessary and<br>unprotected personnel from entering. Do not touch or walk through<br>spilled material. Put on appropriate personal protective equipment.<br>If specialised clothing is required to deal with the spillage, take note of<br>any information in Section 8 on suitable and unsuitable materials. See<br>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). 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 ai | nd cleaning up  |
| Small spill   | :      | Stop leak if without risk. Move containers from spill area. Dilute with<br>water and mop up if water-soluble. Alternatively, or if water-<br>insoluble, absorb with an inert dry material and place in an appropriate<br>waste disposal container. Dispose of via a licensed waste disposal<br>contractor.Stop leak if without risk. Move containers from spill area.<br>Dilute with water and mop up if water-soluble. Alternatively, or if<br>water-insoluble, absorb with an inert dry material and place in an<br>appropriate waste disposal container. Dispose of via a licensed waste<br>disposal contractor. |
| Large spill   | :      | Stop leak if without risk. Move containers from spill area. Approach  |
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release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.Stop leak if without risk. Move containers from spill area. 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. 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<br>Advice on general occupational<br>hygiene | : | Put on appropriate personal protective equipment (see Section 8).<br>Eating, drinking and smoking should be prohibited in areas where this<br>material is handled, stored and processed. Workers should wash hands<br>and face before eating, drinking and smoking. Remove contaminated<br>clothing and protective equipment before entering eating areas. See<br>also Section 8 for additional information on hygiene measures.   |
|--|---|--|
| Conditions for safe storage,<br>including any incompatibilities  | : | Store in accordance with local regulations. Store in original container<br>protected from direct sunlight in a dry, cool and well-ventilated area,<br>away from incompatible materials (see Section 10) and food and<br>drink. Keep container tightly closed and sealed until ready for use.<br>Containers that have been opened must be carefully resealed and kept<br>upright to prevent leakage. Do not store in unlabeled containers. Use<br>appropriate containment to avoid environmental contamination.Store<br>in accordance with local regulations. Store in original container<br>protected from direct sunlight in a dry, cool and well-ventilated area,<br>away from incompatible materials (see Section 10) and food and<br>drink. Keep container tightly closed and sealed until ready for use.<br>Containers that have been opened must be carefully resealed and kept<br>upright to prevent leakage. Do not store in unlabeled containers. Use<br>appropriate container to avoid environmental containers. Use |

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## Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

| Ingredient name                  | Exp   | osure limits  |
|----------------------------------|---|---|
| Titanium dioxide                 | OSI<br>PEI<br>OSI<br>PEI<br>NIC                                   | HA PEL 1989 (1989-03-01)<br>.: Permissible Exposure Level 10 mg/m3 Form: Total dust<br>HA PEL (1993-06-30)<br>.: Permissible Exposure Level 15 mg/m3 Form: Total dust<br>OSH REL (1994-06-01)   |
|                                  | TLV   | GIH TLV (1996-05-18)<br>/-TWA: Threshold Limit Value - Time weighted average PEL:<br>nissible Exposure Level 10 mg/m3   |
| Appropriate engineering controls | enci<br>keej<br>reco  | ser operations generate dust, fumes, gas, vapor or mist, use process<br>losures, local exhaust ventilation or other engineering controls to<br>p worker exposure to airborne contaminants below any<br>ommended or statutory limits.Good general ventilation should be<br>icient to control worker exposure to airborne contaminants.   |
| Environmental exposure controls  | Emi<br>chea<br>env<br>filte<br>neco<br>ven<br>they<br>legi<br>mod | issions from ventilation or work process equipment should be<br>cked to ensure they comply with the requirements of<br>ironmental protection legislation. In some cases, fume scrubbers,<br>ers or engineering modifications to the process equipment will be<br>essary to reduce emissions to acceptable levels.Emissions from<br>tilation or work process equipment should be checked to ensure<br>a comply with the requirements of environmental protection<br>slation. In some cases, fume scrubbers, filters or engineering<br>difications to the process equipment will be necessary to reduce<br>ssions to acceptable levels. |
| Individual protection measures   |   |   |
| Hygiene measures                 | proo<br>of the<br>rem<br>clot<br>sho<br>and<br>smo                | sh hands, forearms and face thoroughly after handling chemical<br>ducts, before eating, smoking and using the lavatory and at the end<br>he working period. Appropriate techniques should be used to<br>to ve potentially contaminated clothing. Wash contaminated<br>hing before reusing. Ensure that eyewash stations and safety<br>wers are close to the workstation location. Wash hands, forearms<br>face thoroughly after handling chemical products, before eating,<br>oking and using the lavatory and at the end of the working period.<br>propriate techniques should be used to remove potentially                         |
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|                          |                       |

|                        |   | contaminated clothing. Wash contaminated clothing before reusing.<br>Ensure that eyewash stations and safety showers are close to the<br>workstation location.  |
|------------------------|---|---|
| Eye/face protection    | : | Safety eyewear complying with an approved standard should be used<br>when a risk assessment indicates this is necessary to avoid exposure to<br>liquid splashes, mists or dusts. If contact is possible, the following<br>protection should be worn, unless the assessment indicates a higher<br>degree of protection: chemical splash goggles. Safety eyewear<br>complying with an approved standard should be used when a risk<br>assessment indicates this is necessary to avoid exposure to liquid<br>splashes, mists, gases or dusts. If contact is possible, the following<br>protection should be worn, unless the assessment indicates a higher<br>degree of protection: safety glasses with side-shields.  |
| Skin protection        |   |   |
| Hand protection        | : | Chemical-resistant, impervious gloves complying with an approved<br>standard should be worn at all times when handling chemical products<br>if a risk assessment indicates this is necessary. Considering the<br>parameters specified by the glove manufacturer, check during use that<br>the gloves are still retaining their protective properties. It should be<br>noted that the time to breakthrough for any glove material may be<br>different for different glove manufacturers. In the case of mixtures,<br>consisting of several substances, the protection time of the gloves<br>cannot be accurately estimated. Chemical-resistant, impervious gloves<br>complying with an approved standard should be worn at all times<br>when handling chemical products if a risk assessment indicates this is<br>necessary. |
| Body protection        | : | Personal protective equipment for the body should be selected based<br>on the task being performed and the risks involved and should be<br>approved by a specialist before handling this product.Personal<br>protective equipment for the body should be selected based on the task<br>being performed and the risks involved and should be approved by a<br>specialist before handling this product.   |
| Other skin protection  | : | Appropriate footwear and any additional skin protection measures<br>should be selected based on the task being performed and the risks<br>involved and should be approved by a specialist before handling this<br>product.  |
| Respiratory protection | : | Use a properly fitted, air-purifying or air-fed respirator complying<br>with an approved standard if a risk assessment indicates this is<br>necessary. Respirator selection must be based on known or anticipated<br>exposure levels, the hazards of the product and the safe working limits<br>of the selected respirator. Use a properly fitted, air-purifying or air-fed<br>respirator complying with an approved standard if a risk assessment<br>indicates this is necessary. Respirator selection must be based on<br>known or anticipated exposure levels, the hazards of the product and  |
|                        |   |   |

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the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

| Physical state:liquid [Paste.]Color:YELLOW        |     |
|---|-----|
| COIOI I ELLOW                                     |     |
| Odor : Not available.                             |     |
| •           |     |
| Odor threshold : Not available.                   |     |
| <b>pH</b> : Not available.                        |     |
| Melting point : Not available.                    |     |
| Boiling point : Not available.                    |     |
| Flash point : Not available.                      |     |
| Burning time : Not available.                     |     |
| Burning rate : Not available.                     |     |
| <b>Evaporation rate</b> : 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.                    |     |
| <b>Relative density</b> : Not available.          |     |
| Solubility : Not available.                       |     |
| Solubility in water : Not available.              |     |
| Partition coefficient: n- : Not available.        |     |
| octanol/water                                     |     |
| Auto-ignition temperature : Not available.        |     |
| <b>Decomposition temperature</b> : Not available. |     |
| SADT : Not available.                             |     |
| Viscosity : Dynamic: Not available                | le. |
| Kinematic: Not availab                            |     |

## 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). Stable under recommended storage and handling   |
| Possibility of hazardous reactions | : | conditions (see Section 7).<br>Under normal conditions of storage and use, hazardous reactions will<br>not occur.Under normal conditions of storage and use, hazardous<br>reactions will not occur. |
| Conditions to avoid                | : | Keep away from extreme heat and oxidizing agents.Keep away from   |
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| Incompatible materials           | : | extreme heat and oxidizing agents.<br>Keep away from strong acids.<br>Oxidizer.Keep away from strong acids.<br>Oxidizer.   |
|----------------------------------|---|--|
| Hazardous decomposition products | : | Under normal conditions of storage and use, hazardous decomposition<br>products should not be produced.Under normal conditions of storage<br>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 |  |  |
|-------------------------|-----------------------------|------------|---------------|----------|--|--|
| Titanium dioxide        |                             |            |               |          |  |  |
|                         | LC50 Inhalation             | Rat - Male | 6.82 Mg/l     | 4 h      |  |  |
|                         | LD50 Dermal                 | Rabbit     | > 5,000 mg/kg | -        |  |  |
| Conclusion/Summary      | : Mixture.Not fully tested. |            |               |          |  |  |

**Conclusion/Summary** 

### **Irritation/Corrosion**

| Product/ingredient name   | Result      | Species         | Score        | Exposure | Observation |
|---------------------------|-------------|-----------------|--------------|----------|-------------|
| Titanium dioxide          | Skin - Mild | Human           |              | 72 hrs   | -           |
|                           | irritant    |                 |              |          |             |
| <b>Conclusion/Summary</b> |             |                 |              |          |             |
| Skin                      | : N         | /lixture.Not fu | Illy tested. |          |             |
| Eyes                      | : N         | /lixture.Not fu | Illy tested. |          |             |
| Respiratory               | : N         | /lixture.Not fu | Illy tested. |          |             |
| <u>Sensitization</u>      |             |                 |              |          |             |
| Conclusion/Summary        |             |                 |              |          |             |
| Skin                      | : N         | /lixture.Not fu | Illy tested. |          |             |
| Respiratory               | : N         | /lixture.Not fu | Illy tested. |          |             |
| <b>Mutagenicity</b>       |             |                 |              |          |             |
| Conclusion/Summary        | : N         | /lixture.Not fu | ally tested. |          |             |
| <b>Carcinogenicity</b>    |             |                 |              |          |             |
|                           |             |                 |              |          |             |



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| Conclusion/Summary<br>Classification                       | :          | Mixture.Not fu                     | lly tested.  |
|--|------------|------------------------------------|--|
|  | OSHA       | IARC                               | NTP  |
| Titanium dioxide   |            | 2B                                 |  |
| <u>Reproductive toxicity</u>                               |            |                                    |  |
| Conclusion/Summary   | :          | Mixture.Not fu                     | lly tested.  |
| <b>Teratogenicity</b>                                      |            |                                    |  |
| Conclusion/Summary   | :          | Mixture.Not fu                     | lly tested.  |
| Specific target organ toxicity (s<br>Not available.        | ingle expo | osure)                             |  |
| <u>Specific target organ toxicity (r</u><br>Not available. | epeated e  | <u>xposure)</u>                    |  |
| Aspiration hazard<br>Not available.                        |            |                                    |  |
| Information on the likely routes exposure                  | of :       | Not available.                     |  |
| Potential acute health effects                             |            |                                    |  |
| Eye contact  | :          | Slightly irritatin<br>hazards.     | ng to the eyes. No known significant effects or critical   |
| Inhalation   | :          | Exposure to dea<br>Serious effects | composition products may cause a health hazard.<br>may be delayed following exposure. No known<br>cts or critical hazards. |
| Skin contact   | :          |                                    | ng to the skin. No known significant effects or critical   |
| Ingestion  | :          |                                    | ificant effects or critical hazards. No known significant al hazards.  |
| Symptoms related to the physics                            | al, chemic | al and toxicolog                   | gical characteristics  |
| Eye contact  | :          | No specific data                   | a.   |
| Inhalation   | :          | No specific data                   | a.   |
| Skin contact   | :          | No specific data                   |  |
| Ingestion  | :          | No specific data                   | a.   |
| Delayed and immediate effects a                            | and also c | hronic effects fi                  | rom short and long term exposure   |

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| Potential immediate effects<br>Potential delayed effects | : | Not available.<br>Not available.  |
|--|---|---|
| Long term exposure                                       |   |   |
| Potential immediate effects<br>Potential delayed effects | : | Not available.<br>Not available.  |
| Potential chronic health effects                         |   |   |
| Conclusion/Summary                                       | : | Mixture.Not fully tested.   |
| General  | : | Contains material that can cause target organ damage. No known significant effects or critical hazards.   |
| Carcinogenicity  | : | Contains material which may cause cancer, based on animal data. Risk<br>of cancer depends on duration and level of exposure. No known<br>significant effects or critical hazards. |
| Mutagenicity   | : | No known significant effects or critical hazards. No known significant effects or critical hazards.   |
| Teratogenicity   | : | No known significant effects or critical hazards. No known significant effects or critical hazards.   |
| Developmental effects                                    | : | No known significant effects or critical hazards. No known significant effects or critical hazards.   |
| Fertility effects  | : | No known significant effects or critical hazards. 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 |
|-------------------------|-----------------------------|-------------|----------|
| Titanium dioxide        |                             |             |          |
|                         | Acute LC50 > 1,000,000 μg/l | Fish - Fish | 96 h     |
|                         | Marine water                |             |          |



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| 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 |
|                                  | 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 | : | Not available.  |
|----------------------------------|---|---|
| (KOC)                            |   |   |
| Other adverse effects            | : | No known significant effects or critical hazards.No known significant |
|                                  |   | effects or critical hazards   |

## Section 13. Disposal considerations

| Disposal methods | : | The generation of waste should be avoided or minimized wherever<br>possible. Disposal of this product, solutions and any by-products |
|------------------|---|--|
|                  |   |  |



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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 containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any byproducts 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 nonrecyclable 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 Classification | : | Not regulated for transportation.     |
|-------------------------|---|---------------------------------------|
| ICAO/IATA               | : | Consult mode specific transport rules |
| IMO/IMDG (maritime)     | : | Consult mode specific transport rules |

## 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         |
|                          | 14/17   |



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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 United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed

| Clean Air Act Section 112(b)       | : | Not listed |
|------------------------------------|---|------------|
| Hazardous Air Pollutants (HAPs)    |   |            |
| Clean Air Act Section 602 Class I  | : | Not listed |
| Substances                         |   |            |
| Clean Air Act Section 602 Class II | : | Not listed |
| Substances                         |   |            |
| DEA List I Chemicals (Precursor    | : | Not listed |
| Chemicals)                         |   |            |
| DEA List II Chemicals (Essential   | : | Not listed |
| Chemicals)                         |   |            |

### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

#### SARA 311/312

Classification

Not applicable.

:



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### **Composition/information on ingredients**

| Name  | %    |  | Classification  |
|---|------|--|---|
| SARA 313<br>Not applicable.   |      |  |   |
| <u>State regulations</u><br>Massachusetts<br>New York<br>New Jersey<br>Pennsylvania | ::   | The following components are list<br>Titanium dioxide<br>None of the components are list<br>The following components are list<br>Titanium dioxide<br>The following components are list<br>Titanium dioxide | l.<br>ted:  |
| <u>California Prop. 65</u><br>WARNING: This product contains a c                    | hemi | cal known to the State of California   | a to cause cancer.  |
| United States inventory (TSCA 8b)   | :    | All components are listed or exen  | npted.  |
| Canada inventory  | :    | All components are listed or exen  | npted.  |
| International regulations   |      |  |   |
| International lists   | :    | Taiwan inventory (CSNN): All<br>Malaysia Inventory (EHS Regis<br>EINECS: All components are lis<br>Japan inventory: Not determine<br>China inventory (IECSC): All<br>Korea inventory: All component        | ted or exempted.<br>ed.<br>components are listed or exempted.<br>nts are listed or exempted.<br><b>micals (NZIoC):</b> All components |
| Chemical Weapons Convention<br>List Schedule I Chemicals                            | :    | Not listed   |   |
| Chemical Weapons Convention<br>List Schedule II Chemicals                           | :    | Not listed   |   |
| Chemical Weapons Convention<br>List Schedule III Chemicals                          | :    | Not listed   |   |



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## Section 16. Other information

| <u>History</u>                 |   |   |
|--------------------------------|---|---|
| Date of printing               | : | 06/24/2016  |
| Date of issue/Date of revision | : | 06/23/2016  |
| Date 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)  |
|                                |   | UN = United Nations   |
| References                     | : | Not available.  |

### Notice to reader

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