

### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 1 of 19 Print Date 03/22/2018

# SAFETY DATA SHEET

#### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

| Section 1. Identification  |            |  |
|--|------------|--|
| GHS product identifier<br>Chemical name<br>CAS number<br>Other means of identification<br>Product type | : : :      | KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.<br>Mixture<br>Mixture<br>CC10277823<br>solid |
| <u>Relevant identified uses of the subs</u><br>Product use   | tance<br>: | e or mixture and uses advised against<br>Industrial applications. Plastics.        |
| Supplier's details   | :          | POLYONE CORPORATION<br>33587 Walker Road, Avon Lake, OH 44012                      |
|  |            | 1 (440) 930-1000 or 1 (866) POLYONE  |
| Emergency telephone number<br>(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<br>Communication Standard (29 CFR 1910.1200), this SDS contains<br>valuable information critical to the safe handling and proper use of the<br>product. This SDS should be retained and available for employees and<br>other users of this product. |
|--|---|--|
| Classification of the substance or mixture | : | Not classified.  |
| GHS label elements                         |   |  |
| Signal word                                | : | No signal word.  |
|  |   | 1/19   |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

:

Version Number 1.0 Revision Date 03/21/2018 Page 2 of 19 Print Date 03/22/2018

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 | : | CC10277823 |

#### CAS number/other identifiers

| Ingredient name                               | %       | CAS number |
|---|---------|------------|
| 2-Propenenitrile, polymer with Ethenylbenzene | 25 - 50 | 9003-54-7  |
| Titanium dioxide                              | 5 - 10  | 13463-67-7 |
| Carbon black                                  | 5 - 10  | 1333-86-4  |
| 2-(2-Hydroxy-5-tert-octylphenyl)benzotriazole | 1 - 3   | 3147-75-9  |
| Styrene                                       | 0 - 0.3 | 100-42-5   |

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.



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 3 of 19 Print Date 03/22/2018

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

### **Section 4. First aid measures**

#### **Description of necessary first aid measures**

| Eye contact  | : | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.   |
|--------------|---|---|
| Inhalation   | : | Remove victim to fresh air and keep at rest in a position comfortable<br>for 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 | : | 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<br>rest in a position comfortable for breathing. If material has been<br>swallowed and the exposed person is conscious, give small quantities<br>of water to drink. Do not induce vomiting unless directed to do so by<br>medical personnel. Get medical attention if symptoms occur. |

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

| Potential acute health effects  |  |
|---------------------------------|--|
| 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.  |
| 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 |
| Specific treatments             | <ul><li>medical surveillance for 48 hours.</li><li>No specific treatment.</li></ul>  |
|                                 | 2/40   |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

:

Version Number 1.0 Revision Date 03/21/2018 Page 4 of 19 Print Date 03/22/2018

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### **Section 5. Firefighting measures**

#### **Extinguishing media**

| Suitable extinguishing media<br>Unsuitable extinguishing media | : | In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$ .<br>None known.   |
|--|---|---|
| Specific hazards arising from the chemical                     | : | No specific fire or explosion hazard.   |
| Hazardous thermal<br>decomposition products                    | : | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>metal oxide/oxides   |
| 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. |
| Special protective equipment for 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.                        |

### 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 specialized clothing is required to deal with the spillage, take note<br>of any information in Section 8 on suitable and unsuitable materials.<br>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).   |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018

#### Page 5 of 19 Print Date 03/22/2018

#### Methods and materials for containment and cleaning up

| Small spill | : | Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.   |
|-------------|---|---|
| Large spill | : | Move containers from spill area. Prevent entry into sewers, water<br>courses, basements or confined areas. Vacuum or sweep up material<br>and place in a designated, labeled waste container. Dispose of via a<br>licensed waste disposal contractor. Note: see Section 1 for emergency<br>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. |

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

| Ingredient name | Exposure limits   |
|-----------------|---|
| Styrene         | OSHA PEL 1989 (1989-03-01)  |
|                 | PEL: Permissible Exposure Level 215 mg/m3 50 ppm                    |
|                 | 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. 425 mg/m3 100 ppm                 |



## KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018

|   | OSHA PEL Z2 (1993-06-30)PEL: Permissible Exposure Level 100 ppmCeiling-A concentration that should not be exceeded at any timeduring any part of the working day. 200 ppmAcceptable Maximum Peak (AMP) 600 ppmNIOSH REL (1994-06-01)Time Weighted Average (TWA) 215 mg/m3 50 ppmShort-term exposure limit (STEL). A limit value beyond whichthere should be no exposure and which refers to a period of fifteenminutes, unless otherwise stated. 425 mg/m3 100 ppm |
|---|--|
|   | ACGIH TLV (1997-05-21)<br>TLV-TWA: Threshold Limit Value - Time weighted average PEL:<br>Permissible Exposure Level 85 mg/m3 20 ppm<br>TLV-STEL: Threshold Limit Value - Short Time Exposure Level<br>170 mg/m3 40 ppm   |
| 2-(2-Hydroxy-5-tert-<br>octylphenyl)benzotriazole |  |
| Titanium dioxide                                  | OSHA PEL 1989 (1989-03-01)PEL: Permissible Exposure Level 10 mg/m3 Form: Total dustOSHA PEL (1993-06-30)PEL: Permissible Exposure Level 15 mg/m3 Form: Total dustNIOSH REL (1994-06-01)ACGIH TLV (1996-05-18)TLV-TWA: Threshold Limit Value - Time weighted average PEL:Permissible Exposure Level 10 mg/m3  |
| Carbon black                                      | OSHA PEL 1989 (1989-03-01)PEL: Permissible Exposure Level 3.5 mg/m3OSHA PEL (1993-06-30)PEL: Permissible Exposure Level 3.5 mg/m3NIOSH REL (1994-06-01)Time Weighted Average (TWA) 3.5 mg/m3Time Weighted Average (TWA)ACGIH TLV (2010-12-06)TLV-TWA: Threshold Limit Value - Time weighted average PEL:Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction  |
| 2-Propenenitrile, polymer with<br>Ethenylbenzene  |  |



## KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

| Version Number 1.0<br>Revision Date 03/21/2018 |   | Page 7 of 19<br>Print Date 03/22/2018   |  |  |  |
|--|---|---|--|--|--|
|  |   |   |  |  |  |
| Appropriate engineering controls               | : | Good general ventilation should be sufficient to control worker exposure to airborne contaminants.  |  |  |  |
| Environmental exposure controls                | : | exposure to airborne contaminants.<br>Emissions from ventilation or work process equipment should be<br>checked to ensure they comply with the requirements of<br>environmental protection legislation. In some cases, fume scrubbe<br>filters or engineering modifications to the process equipment will<br>necessary to reduce emissions to acceptable levels.  |  |  |  |
| Individual protection measures                 |   |   |  |  |  |
| Hygiene measures                               | : | Wash hands, forearms and face thoroughly after handling chemical<br>products, before eating, smoking and using the lavatory and at the end<br>of the working period. Appropriate techniques should be used to<br>remove potentially contaminated clothing. Wash contaminated<br>clothing before reusing. Ensure that eyewash stations and safety  |  |  |  |
| Eye/face protection                            | : | showers are close to the workstation location.<br>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, gases or dusts. If contact is possible, the<br>following protection should be worn, unless the assessment indicates a<br>higher 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.   |  |  |  |
| 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.   |  |  |  |
| 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                         | : | Based on the hazard and potential for exposure, select a respirator that<br>meets the appropriate standard or certification. Respirators must be<br>used according to a respiratory protection program to ensure proper<br>fitting, training, and other important aspects of use.   |  |  |  |

## Section 9. Physical and chemical properties

#### **Appearance**

| Physical state | solid [Pellets.] |
|----------------|------------------|
| Color          | : BLACK          |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018

### Page 8 of 19 Print Date 03/22/2018

|  | <b>—</b>                         |
|--|----------------------------------|
| Odor                                       | : Faint odor.                    |
| Odor threshold                             | : Not available.                 |
| рН   | : 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                  | <b>:</b> 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-<br>octanol/water | : Not available.                 |
| Auto-ignition temperature                  | Not available.                   |
| Decomposition temperature                  | Not available.                   |
| SADT                                       | Not available.                   |
| Viscosity                                  | <b>: Dynamic:</b> Not available. |
| •  | Kinematic: Not available.        |

## Section 10. Stability and reactivity

| Reactivity                         | : | No specific test data related to reactivity available for this product or its ingredients.           |
|------------------------------------|---|--|
| 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.<br>Oxidizer.  |
| Hazardous decomposition products   | : | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 9 of 19 Print Date 03/22/2018

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 |
|--------------------------------|-----------------------------|---------------------|---------------|----------|
| Styrene                        |                             |                     |               |          |
|                                | LD50 Oral                   | Rat                 | 2,650 mg/kg   | -        |
|                                | LC50 Inhalation             | Rat                 | 2,770 ppm     | 4 h      |
|                                | LC50 Inhalation             | Rat                 | 11.8 Mg/l     | 4 h      |
| Remarks - Dermal:              | No applicable toxi          | city data           |               |          |
| 2-(2-Hydroxy-5-tert-octylphen  | yl)benzotriazole            |                     |               |          |
|                                | LD50 Oral                   | Rat                 | 1,000 mg/kg   | -        |
| <b>Remarks - Inhalation:</b>   | No applicable toxi          | city data           |               |          |
| Remarks - Dermal:              | No applicable toxicity data |                     |               |          |
| Titanium dioxide               |                             |                     |               |          |
| Remarks - Oral:                | No applicable toxi          | city data           |               |          |
|                                | LC50 Inhalation             | Rat - Male          | 6.82 Mg/l     | 4 h      |
|                                | LD50 Dermal                 | Rabbit              | > 5,000 mg/kg | -        |
| Carbon black                   |                             |                     |               |          |
|                                | LD50 Oral                   | Rat                 | 15,400 mg/kg  | -        |
| <b>Remarks - Inhalation:</b>   | No applicable toxicity data |                     |               |          |
| Remarks - Dermal:              | No applicable toxicity data |                     |               |          |
| 2-Propenenitrile, polymer with | Ethenylbenzene              |                     |               |          |
|                                | LD50 Oral                   | Rat                 | 1,800 mg/kg   | -        |
| <b>Remarks - Inhalation:</b>   | No applicable toxi          | city data           |               |          |
| <b>Remarks - Dermal:</b>       | No applicable toxicity data |                     |               |          |
| Conclusion/Summarv             | • Mixtu                     | re.Not fully tested | 1.            |          |

Conclusion/Summary

Mixture.Not fully tested.

#### **Irritation/Corrosion**

| Product/ingredient name | Result        | Species | Score | Exposure | Observation |
|-------------------------|---------------|---------|-------|----------|-------------|
| Styrene                 | Eyes - Mild   | Human   |       |          | -           |
|                         | irritant      |         |       |          |             |
|                         | Skin - Mild   | Rabbit  |       |          | -           |
|                         | irritant      |         |       |          |             |
|                         | Skin -        | Rabbit  |       |          | -           |
|                         | Moderate      |         |       |          |             |
|                         | irritant      |         |       |          |             |
|                         | Eyes - Severe | Rabbit  |       |          | -           |
|                         | irritant      |         |       |          |             |
|                         | Eyes -        | Rabbit  |       | 24 hrs   | -           |



## KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 10 of 19 Print Date 03/22/2018

|  | Moderate                    |   |            |                   |                       |
|--|-----------------------------|---|------------|-------------------|-----------------------|
|  | irritant                    | IL  |            | 70 1              |                       |
| Titanium dioxide   | Skin - Mild<br>irritant     | Human   |            | 72 hrs            | -                     |
| Conclusion/Summary   |                             |   |            |                   |                       |
| Skin   | : N                         | lixture.Not fully                                   | y tested.  |                   |                       |
| Eyes   | : Mixture.Not fully tested. |   |            |                   |                       |
| Respiratory  | : N                         | lixture.Not fully                                   | y tested.  |                   |                       |
| <b>Sensitization</b>   |                             |   |            |                   |                       |
| Conclusion/Summary   |                             |   |            |                   |                       |
| Skin   |                             | lixture.Not fully                                   |            |                   |                       |
| Respiratory  | : N                         | lixture.Not fully                                   | y tested.  |                   |                       |
| <b>Mutagenicity</b>  |                             |   |            |                   |                       |
| Conclusion/Summary   | : N                         | lixture.Not fully                                   | v tested.  |                   |                       |
| <b>Carcinogenicity</b>   |                             |   |            |                   |                       |
| Conclusion/Summary   | : N                         | lixture.Not fully                                   | y tested.  |                   |                       |
| Classification   | •                           |   |            |                   |                       |
| Product/ingredient   | OSHA                        | IARC  | NTP        |                   |                       |
| 0  |                             |   |            |                   |                       |
| name   |                             |   |            |                   |                       |
| name<br>Styrene  |                             | 2B  | Reasonably | anticipated to be | e a human carcinogen. |
| name<br>Styrene<br>Titanium dioxide  |                             | 2B  | Reasonably | anticipated to be | e a human carcinogen. |
| nameStyreneTitanium dioxideCarbon black  |                             | 2B<br>2B  | Reasonably | anticipated to be | e a human carcinogen. |
| name<br>Styrene<br>Titanium dioxide<br>Carbon black<br>2-Propenenitrile, polymer   |                             | 2B  | Reasonably | anticipated to be | e a human carcinogen. |
| name<br>Styrene<br>Titanium dioxide<br>Carbon black  |                             | 2B<br>2B  | Reasonably | anticipated to be | e a human carcinogen. |
| name<br>Styrene<br>Titanium dioxide<br>Carbon black<br>2-Propenenitrile, polymer<br>with Ethenylbenzene  | : M                         | 2B<br>2B  |            | anticipated to be | e a human carcinogen. |
| nameStyreneTitanium dioxideCarbon black2-Propenenitrile, polymerwith Ethenylbenzene  | : M                         | 2B<br>2B<br>3                                       |            | anticipated to be | e a human carcinogen. |
| name   Styrene   Titanium dioxide   Carbon black   2-Propenenitrile, polymer   with Ethenylbenzene   Reproductive toxicity   Conclusion/Summary                  |                             | 2B<br>2B<br>3                                       | y tested.  | anticipated to be | e a human carcinogen. |
| name   Styrene   Titanium dioxide   Carbon black   2-Propenenitrile, polymer   with Ethenylbenzene   Reproductive toxicity   Conclusion/Summary   Teratogenicity | : M                         | 2B   2B   3   fixture.Not fully   fixture.Not fully | y tested.  | anticipated to be | e a human carcinogen. |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 11 of 19 Print Date 03/22/2018

| Aspiration hazard<br>Not available.      |         |   |
|--|---------|---|
| Information on likely routes of exposure | :       | Not available.                                    |
| Potential acute health effects           |         |   |
| Eye contact                              | :       | No known significant effects or critical hazards. |
| Inhalation                               | :       | No known significant effects or critical hazards. |
| Skin contact                             | :       | No known significant effects or critical hazards. |
| Ingestion                                | :       | No known significant effects or critical hazards. |
| Symptoms related to the physical,        | chemic  | cal 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                      |         |   |
| Potential immediate effects              | :       | Not available.                                    |
| Potential delayed effects                | :       | Not available.                                    |
| Long term exposure                       |         |   |
| Potential immediate effects              | :       | Not available.                                    |
| Potential delayed effects                |         | Not available.                                    |
| Potential chronic health effects         |         |   |
| Conclusion/Summary                       | :       | Mixture.Not fully tested.                         |
| General                                  | :       | No known significant effects or critical hazards. |
| Carcinogenicity                          | :       | No known significant effects or critical hazards. |
| Mutagenicity                             | :       | No known significant effects or critical hazards. |
| Teratogenicity                           | -       | No known significant effects or critical hazards. |
| Developmental effects                    |         | No known significant effects or critical hazards. |
| Fertility effects                        |         | No known significant effects or critical hazards. |
|  |         | 0   |

Numerical measures of toxicity



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 12 of 19 Print Date 03/22/2018

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

**Toxicity** 

| Product/ingredient name       | Result                           | Species                | Exposure |  |
|-------------------------------|----------------------------------|------------------------|----------|--|
| Styrene                       |                                  |                        |          |  |
|                               | Acute LC50 4.02 Mg/l Fresh water | Fish - Fish            | 96 h     |  |
| Remarks - Acute - Fish:       | Acute                            |                        |          |  |
|                               | Acute EC50 0.0047 Mg/l Fresh     | Aquatic invertebrates. | 48 h     |  |
|                               | water                            | Daphnia                |          |  |
| Remarks - Acute - Aquatic     | Acute                            |                        |          |  |
| invertebrates.:               |                                  |                        |          |  |
|                               | Acute LC50 52 Mg/l Marine water  | Aquatic invertebrates. | 48 h     |  |
|                               |                                  | Crustaceans            |          |  |
| Remarks - Acute - Aquatic     | Acute                            |                        |          |  |
| invertebrates.:               |                                  | 1                      | 1        |  |
|                               | Acute EC50 1.4 Mg/l Fresh water  | Aquatic plants - Algae | 72 h     |  |
| Remarks - Acute - Aquatic     | Acute                            |                        |          |  |
| plants:                       |                                  | 1                      | 1        |  |
|                               | Acute EC50 0.72 Mg/l Fresh water | Aquatic plants - Algae | 96 h     |  |
| Remarks - Acute - Aquatic     | Acute                            |                        |          |  |
| plants:                       |                                  | 1                      | -        |  |
|                               | Acute NOEC 0.063 Mg/l Fresh      | Aquatic plants - Algae | 96 h     |  |
|                               | water                            |                        |          |  |
| Remarks - Acute - Aquatic     | Chronic                          |                        |          |  |
| plants:                       |                                  |                        |          |  |
| Remarks - Chronic - Fish:     | No applicable toxicity data      |                        |          |  |
| <b>Remarks - Chronic -</b>    | No applicable toxicity data      |                        |          |  |
| Aquatic invertebrates.:       |                                  |                        |          |  |
| 2-(2-Hydroxy-5-tert-octylphen |                                  |                        |          |  |
| Remarks - Acute - Fish:       | No applicable toxicity data      |                        |          |  |
| Remarks - Acute - Aquatic     | No applicable toxicity data      |                        |          |  |
| invertebrates.:               |                                  |                        |          |  |
| Remarks - Acute - Aquatic     | No applicable toxicity data      |                        |          |  |
| plants:                       |                                  |                        |          |  |
| Remarks - Chronic - Fish:     | No applicable toxicity data      |                        |          |  |
| Remarks - Chronic -           | No applicable toxicity data      |                        |          |  |
| Aquatic invertebrates.:       | -                                |                        |          |  |
|                               | 12/19                            |                        |          |  |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 13 of 19 Print Date 03/22/2018

| Titanium dioxide                 |                                       |   |                   |  |  |  |
|----------------------------------|---------------------------------------|---|-------------------|--|--|--|
|                                  | Acute LC50 > 1,000 Mg/l Marine        | 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           |   |                   |  |  |  |
| <b>Remarks - Chronic -</b>       | No applicable toxicity data           |   |                   |  |  |  |
| Aquatic invertebrates.:          |                                       |   |                   |  |  |  |
| 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.:                  |                                       |   |                   |  |  |  |
| <b>Remarks - Acute - Aquatic</b> | No applicable toxicity data           |   |                   |  |  |  |
| plants:                          |                                       |   |                   |  |  |  |
| Remarks - Chronic - Fish:        | No applicable toxicity data           |   |                   |  |  |  |
| <b>Remarks - Chronic -</b>       | No applicable toxicity data           |   |                   |  |  |  |
| Aquatic invertebrates.:          |                                       |   |                   |  |  |  |
| 2-Propenenitrile, polymer with   |                                       |   |                   |  |  |  |
| Remarks - Acute - Fish:          | No applicable toxicity data           |   |                   |  |  |  |
| <b>Remarks - Acute - Aquatic</b> | No applicable toxicity data           |   |                   |  |  |  |
| invertebrates.:                  |                                       |   |                   |  |  |  |
| Remarks - Acute - Aquatic        | No applicable toxicity data           |   |                   |  |  |  |
| plants:                          |                                       |   |                   |  |  |  |
| Remarks - Chronic - Fish:        | No applicable toxicity data           |   |                   |  |  |  |
| Remarks - Chronic -              | No applicable toxicity data           |   |                   |  |  |  |
| Aquatic invertebrates.:          |                                       |   |                   |  |  |  |
| KU82V TITAN SCHWARZ/P            |                                       |   | <u> </u>          |  |  |  |
| Remarks - Acute - Aquatic        | Chemicals are not readily available a | as they are bound within the                    | e polymer matrix. |  |  |  |
| invertebrates.:                  |                                       |   |                   |  |  |  |
| <b>Conclusion/Summary</b>        |                                       | ly available as they are bou                    | nd within the     |  |  |  |
|                                  | polymer matrix.                       |   |                   |  |  |  |

Persistence and degradability



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

| Version Number 1.0       | Page 14 of 19         |
|--------------------------|-----------------------|
| Revision Date 03/21/2018 | Print Date 03/22/2018 |

| 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 |
|-------------------------|--------|-------|-----------|
| Benzene, ethenyl-       | 0.35   | 13.49 | low       |

#### **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<br>possible. Disposal of this product, solutions and any by-products<br>should at all times comply with the requirements of environmental<br>protection and waste disposal legislation and any regional local<br>authority requirements. Dispose of surplus and non-recyclable<br>products via a licensed waste disposal contractor. Waste should not be<br>disposed of untreated to the sewer unless fully compliant with the<br>requirements of all authorities with jurisdiction. Waste packaging<br>should be recycled. Incineration or landfill should only be considered<br>when recycling is not feasible. This material and its container must be<br>disposed of in a safe way. Empty containers or liners may retain some<br>product residues. Avoid dispersal of spilled material and runoff and |
|------------------|--|
|                  | 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.



## KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

| Version Number 1.0       | Page 15 of 19         |
|--------------------------|-----------------------|
| Revision Date 03/21/2018 | Print Date 03/22/2018 |

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

## Section 15. Regulatory information

| U.S. Federal regulations | : United States - TSCA 12(b) - Chemical export notification: None |
|--------------------------|---|
|                          | of the components are listed.                                     |
|                          | United States - TSCA 4(a) - Final Test Rules: Not listed          |
|                          | United States - TSCA 4(a) - ITC Priority list: Not listed         |
|                          | United States - TSCA 4(a) - Proposed test rules: Not listed       |
|                          | United States - TSCA 4(f) - Priority risk review: Not listed      |
|                          | United States - TSCA 5(a)2 - Final significant new use rules: Not |
|                          | listed  |
|                          | United States - TSCA 5(a)2 - Proposed significant new use rules:  |
|                          | Not listed  |
|                          | United States - TSCA 5(e) - Substances consent order: Not listed  |
|                          | United States - TSCA 6 - Final risk management: Not listed        |
|                          | United States - TSCA 6 - Proposed risk management: Not listed     |
|                          | United States - TSCA 8(a) - Chemical risk rules: Not listed       |
|                          | United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed    |
|                          | United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not    |
|                          | determined  |
|                          | United States - TSCA 8(a) - Preliminary assessment report         |
|                          | (PAIR): Not listed  |
|                          | United States - TSCA 8(c) - Significant adverse reaction (SAR):   |
|                          | Not listed  |
|                          | United States - TSCA 8(d) - Health and safety studies: Not listed |
|                          | United States - EPA Clean water act (CWA) section 307 - Priority  |
|                          | pollutants: Listed Acrylonitrile                                  |
|                          | Rutile, antimony chromium buff                                    |
|                          | United States - EPA Clean water act (CWA) section 311 -           |
|                          | Hazardous substances: 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  |
|                          |   |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 16 of 19 Print Date 03/22/2018

| Clean Air Act Section 112(b)           | : | 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                             |   |            |
| <b>DEA List I Chemicals (Precursor</b> | : | 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.

:

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

| Name  | %       | Classification |
|---|---------|----------------|
| Styrene   | 0 - 0.3 | F, AH, CH      |
| 2-(2-Hydroxy-5-tert-<br>octylphenyl)benzotriazole | 1 - 3   | AH             |
| Titanium dioxide                                  | 5 - 10  | СН             |
| Carbon black                                      | 5 - 10  | СН             |
| 2-Propenenitrile, polymer with<br>Ethenylbenzene  | 25 - 50 | АН             |

#### SARA 313

|                                 | Product name                   | CAS number | %       |
|---------------------------------|--------------------------------|------------|---------|
| Form R - Reporting requirements | Styrene                        | 100-42-5   | 0 - 0.3 |
|                                 | Rutile, antimony chromium buff | 68186-90-3 | 10 - 25 |
| Supplier notification           | Styrene                        | 100-42-5   | 0 - 0.3 |
|                                 | Rutile, antimony chromium buff | 68186-90-3 | 10 - 25 |

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



## KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 17 of 19 Print Date 03/22/2018

| State regulations  |       |  |
|--|-------|--|
| Massachusetts  | :     | None of the components are listed.   |
| New York   | :     | The following components are listed:<br>Styrene  |
| New Jersey   | :     | The following components are listed:<br>2-Propenenitrile, polymer with Ethenylbenzene<br>Rutile, antimony chromium buff<br>Carbon black<br>Titanium dioxide<br>Iron oxide<br>Styrene |
| Pennsylvania   | :     | The following components are listed:   |
| •  |       | Rutile, antimony chromium buff   |
|  |       | Carbon black   |
|  |       |  |
|  |       | Iron oxide   |
|  |       | Styrene  |
| California Prop. 65<br>WARNING: This product contains a cl | nemio | cal known to the State of California to cause cancer.  |
| United States inventory (TSCA 8b)                          | :     | All components are listed or exempted.   |
| Canada inventory   | :     | All components are listed or exempted.   |

#### **International regulations**

| Inventory list |
|----------------|
|----------------|

| Australia<br>Canada<br>China<br>Europe inventory<br>Japan<br>New Zealand<br>Philippines<br>Republic of Korea<br>Taiwan |   | All components are listed or exempted.<br>All components are listed or exempted.<br>Not determined.<br>All components are listed or exempted.<br>Not determined.<br>Not determined.<br>All components are listed or exempted.<br>All components are listed or exempted.<br>Not determined. |
|--|---|--|
| Turkey   | : | Not determined.  |



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 18 of 19 Print Date 03/22/2018

**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

| <b>Histor</b> y                |   |  |
|--------------------------------|---|--|
| Date of printing               | : | 03/22/2018   |
| Date of issue/Date of revision | : | 03/21/2018   |
| 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 = 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 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



### KU82V TITAN SCHWARZ/PULSE GX50 V.1.0.

Version Number 1.0 Revision Date 03/21/2018 Page 19 of 19 Print Date 03/22/2018

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.