

Version: 1.2 Revision Date: 09/30/2019

# SAFETY DATA SHEET

#### 1. Identification

Material name: UNIVERSAL COLOR PACK STANDARD GRAY-CS Material: 0159480Q529

#### Recommended use and restriction on use

Recommended use: Colorant Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

#### 2. Hazard(s) identification

#### **Hazard Classification**

#### Health Hazards

| Acute toxicity (Inhalation - dust and mist) | Category 4  |
|---|-------------|
| Carcinogenicity                             | Category 1A |

#### **Unknown toxicity - Health**

| Acute toxicity, oral                     | 0.42 %  |
|--|---------|
| Acute toxicity, dermal                   | 56.59 % |
| Acute toxicity, inhalation, vapor        | 97.38 % |
| Acute toxicity, inhalation, dust or mist | 94.73 % |

#### **Environmental Hazards**

| Acute hazards to the aquatic | Category 1 |
|------------------------------|------------|
| environment                  |            |

#### **Unknown toxicity - Environment**

| Acute hazards to the aquatic               | 15 %    |
|--|---------|
| environment                                |         |
| Chronic hazards to the aquatic environment | 97.38 % |

#### Label Elements



Hazard Symbol:

| Signal Word:                     | Danger  |
|----------------------------------|---|
| Hazard Statement:                | Harmful if inhaled.<br>May cause cancer.<br>Very toxic to aquatic life.   |
| Precautionary<br>Statements      |   |
| Prevention:                      | Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment. |
| Response:                        | IF INHALED: Remove person to fresh air and keep comfortable for<br>breathing. Call a POISON CENTER/doctor if you feel unwell. Collect<br>spillage.  |
| Storage:                         | Store locked up.  |
| Disposal:                        | Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.  |
| (s) not otherwise<br>ied (HNOC): | None.   |

# 3. Composition/information on ingredients

### **Mixtures**

| Chemical Identity                        | CAS number | Content in percent (%)* |
|--|------------|-------------------------|
| Titanium dioxide                         | 13463-67-7 | 20 - <50%               |
| Diisodecyl phthalate                     | 26761-40-0 | 25 - <50%               |
| Carbon Black                             | 1333-86-4  | 1 - <5%                 |
| Calcium oxide                            | 1305-78-8  | 1 - <5%                 |
| Aluminum oxide                           | 1344-28-1  | 1 - <5%                 |
| Iron oxide                               | 1309-37-1  | 0.1 - <1%               |
| Amorphous silica                         | 7631-86-9  | 0.1 - <1%               |
| Zirconium dioxide                        | 1314-23-4  | 0.1 - <1%               |
| Hydrotreated heavy naphthenic distillate | 64742-52-5 | 0.1 - <1%               |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.



| 4. First-aid measures  |  |  |  |  |
|--|--|--|--|--|
| Description of necessary first-aid measures  |  |  |  |  |
| Move to fresh air.   |  |  |  |  |
| Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.   |  |  |  |  |
| Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.  |  |  |  |  |
| Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.   |  |  |  |  |
| Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |  |  |  |  |
| cts, acute and delayed   |  |  |  |  |
| May cause skin and eye irritation.   |  |  |  |  |
| No data available.   |  |  |  |  |
| l attention and special treatment needed   |  |  |  |  |
| Symptoms may be delayed.   |  |  |  |  |
| 5. Fire-fighting measures  |  |  |  |  |
|  |  |  |  |  |
| No unusual fire or explosion hazards noted.  |  |  |  |  |
| No unusual fire or explosion hazards noted.<br>Juishing media  |  |  |  |  |
|  |  |  |  |  |
| uishing media  |  |  |  |  |
| <b>juishing media</b><br>Use fire-extinguishing media appropriate for surrounding materials.   |  |  |  |  |
| <b>juishing media</b><br>Use fire-extinguishing media appropriate for surrounding materials.<br>Do not use water jet as an extinguisher, as this will spread the fire.   |  |  |  |  |
| Juishing media<br>Use fire-extinguishing media appropriate for surrounding materials.<br>Do not use water jet as an extinguisher, as this will spread the fire.<br>During fire, gases hazardous to health may be formed. |  |  |  |  |
|  |  |  |  |  |

# 6. Accidental release measures



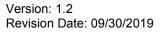
| Personal precautions,<br>protective equipment and<br>emergency procedures: | No data available.  |
|--|---|
| Accidental release measures:   | In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.   |
| Methods and material for<br>containment and cleaning<br>up:                | Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.   |
| Environmental Precautions:   | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.  |
| 7. Handling and storage  |   |
| Handling   |   |
| Technical measures (e.g. Local and general ventilation):                   | Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.  |
| Safe handling advice:  | Provide adequate ventilation. Wear appropriate personal protective<br>equipment. Observe good industrial hygiene practices.Do not handle until<br>all safety precautions have been read and understood. Obtain special<br>instructions before use. Use personal protective equipment as required. |
| Contact avoidance measures:  | No data available.  |
| Hygiene measures:  | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.   |
| Storage  |   |
| Safe storage conditions:   | Store locked up.  |
| Safe packaging materials:  | No data available.  |

# 8. Exposure controls/personal protection

# **Control Parameters**

### **Occupational Exposure Limits**

| Chemical Identity                          | Туре | Exposure Limit Values                                   | Source  |
|--|------|---|---|
| Titanium dioxide                           | TWA  | 10 mg/m3  | US. ACGIH Threshold Limit Values, as<br>amended (2011)  |
| Titanium dioxide - Total dust.             | PEL  | 15 mg/m3  | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Titanium dioxide - Respirable fraction.    | TWA  | 15 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Titanium dioxide - Total dust.             | TWA  | 15 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Titanium dioxide - Respirable<br>fraction. | TWA  | 5 mg/m3   | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |





| Titanium dioxide - Total dust.                                       | TWA  | 50 millions of<br>particles per<br>cubic foot of        | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
|--|------|---|---|
|  |      | air   |   |
| Carbon Black - Inhalable fraction.                                   | TWA  | 3 mg/m3   | US. ACGIH Threshold Limit Values, as<br>amended (2011)  |
| Carbon Black   | PEL  | 3.5 mg/m3   | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Calcium oxide  | TWA  | 2 mg/m3   | US. ACGIH Threshold Limit Values, as amended (2011)   |
|  | PEL  | 5 mg/m3   | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Aluminum oxide - Respirable fraction.                                | TWA  | 1 mg/m3   | US. ACGIH Threshold Limit Values, as<br>amended (2011)  |
|  | PEL  | 5 mg/m3   | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Aluminum oxide - Total dust.   | PEL  | 15 mg/m3  | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
|  | TWA  | 50 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Aluminum oxide - Respirable<br>fraction.                             | TWA  | 15 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
|  | TWA  | 5 mg/m3   | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Aluminum oxide - Total dust.   | TWA  | 15 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Iron oxide - Respirable<br>fraction.                                 | TWA  | 5 mg/m3   | US. ACGIH Threshold Limit Values, as<br>amended (2011)  |
| Iron oxide - Fume.   | PEL  | 10 mg/m3  | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Iron oxide - Total dust.   | TWA  | 50 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Iron oxide - Respirable fraction.                                    | TWA  | 5 mg/m3   | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
|  | TWA  | 15 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Iron oxide - Total dust.   | TWA  | 15 mg/m3  | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)                                   |
| Amorphous silica   | TWA  | 20 millions of<br>particles per<br>cubic foot of<br>air | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)                                      |
|  | TWA  | 0.8 mg/m3   | US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)                                      |
| Zirconium dioxide - as Zr  | STEL | 10 mg/m3  | US. ACGIH Threshold Limit Values, as amended (2011)   |
|  | TWA  | 5 mg/m3   | US. ACGIH Threshold Limit Values, as<br>amended (2011)  |
|  | PEL  | 5 mg/m3   | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as<br>amended (02 2006) |
| Hydrotreated heavy<br>naphthenic distillate -<br>Inhalable fraction. | TWA  | 5 mg/m3   | US. ACGIH Threshold Limit Values, as amended (03 2014)  |
| Hydrotreated heavy<br>naphthenic distillate                          | PEL  | 500 ppm 2,000 mg/m3                                     | US. OSHA Table Z-1 Limits for Air<br>Contaminants (29 CFR 1910.1000), as                      |



|                               |     |         | amended (02 2006)                   |
|-------------------------------|-----|---------|-------------------------------------|
| Hydrotreated heavy            | PEL | 5 mg/m3 | US. OSHA Table Z-1 Limits for Air   |
| naphthenic distillate - Mist. |     | _       | Contaminants (29 CFR 1910.1000), as |
|                               |     |         | amended (02 2006)                   |



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| Chemical name                                       | Туре | Exposure Limit Values | Source   |
|---|------|-----------------------|--|
| Titanium dioxide - Total dust.                      | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction.             | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Titanium dioxide                                    | TWA  | 10 mg/m3              | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Titanium dioxide - Total dust.                      | TWA  | 10 mg/m3              | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Diisodecyl phthalate                                | TWA  | 5 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Carbon Black - Inhalable                            | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (09 2011) |
| Carbon Black - Inhalable fraction.                  | TWA  | 3 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Carbon Black  | TWA  | 3.5 mg/m3             | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Calcium oxide                                       | TWA  | 2 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Calcium oxide                                       | TWA  | 2 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Calcium oxide                                       | TWA  | 2 mg/m3               | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Aluminum oxide - Respirable.                        | TWA  | 1 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Aluminum oxide - Total dust.                        | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction.               | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction.               | TWA  | 1 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Aluminum oxide - Inhalable fraction.                | TWA  | 10 mg/m3              | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Aluminum oxide - Respirable fraction.               | TWA  | 3 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Aluminum oxide - Total dust.<br>- as Al             | TWA  | 10 mg/m3              | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Hydrotreated heavy<br>naphthenic distillate - Mist. | TWA  | 0.2 mg/m3             | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |



|  | TWA  | 1 mg/m3  | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
|--|------|----------|--|
| Hydrotreated heavy<br>naphthenic distillate -<br>Inhalable fraction. | TWA  | 5 mg/m3  | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
|  | TWA  | 5 mg/m3  | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Hydrotreated heavy naphthenic distillate - Mist.                     | STEL | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
|  | TWA  | 5 mg/m3  | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |



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| Chemical name                           | Туре | Exposure Limit Values | Source   |
|---|------|-----------------------|--|
| Titanium dioxide - Total dust.          | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Titanium dioxide - Respirable fraction. | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Titanium dioxide                        | TWA  | 10 mg/m3              | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Titanium dioxide - Total dust.          | TWA  | 10 mg/m3              | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Diisodecyl phthalate                    | TWA  | 5 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Carbon Black - Inhalable                | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (09 2011) |
| Carbon Black - Inhalable fraction.      | TWA  | 3 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Carbon Black                            | TWA  | 3.5 mg/m3             | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Calcium oxide                           | TWA  | 2 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Calcium oxide                           | TWA  | 2 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Calcium oxide                           | TWA  | 2 mg/m3               | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Aluminum oxide - Respirable.            | TWA  | 1 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Aluminum oxide - Total dust.            | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction.   | TWA  | 3 mg/m3               | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
| Aluminum oxide - Respirable fraction.   | TWA  | 1 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Aluminum oxide - Inhalable fraction.    | TWA  | 10 mg/m3              | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Aluminum oxide - Respirable fraction.   | TWA  | 3 mg/m3               | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Aluminum oxide - Total dust.<br>- as Al | TWA  | 10 mg/m3              | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Iron oxide - Total dust.                | TWA  | 10 mg/m3              | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |



| Iron avida Duat da Fa                               | TWA  | E ==== (=== ) | Canada Dritish Calumbia OELa (Oscurational   |
|---|------|---------------|--|
| Iron oxide - Dust as Fe                             |      | 5 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Iron oxide - Fume as Fe                             | STEL | 10 mg/m3      | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Iron oxide - Respirable<br>fraction.                | TWA  | 3 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Iron oxide - Fume as Fe                             | TWA  | 5 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Iron oxide - Respirable fraction.                   | TWA  | 5 mg/m3       | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Iron oxide - Total dust.                            | TWA  | 10 mg/m3      | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Iron oxide - Dust and fume<br>as Fe                 | TWA  | 5 mg/m3       | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Amorphous silica - Total                            | TWA  | 4 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Amorphous silica -<br>Respirable.                   | TWA  | 1.5 mg/m3     | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Amorphous silica -<br>Respirable dust.              | TWA  | 6 mg/m3       | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Zirconium dioxide - as Zr                           | STEL | 10 mg/m3      | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
|   | TWA  | 5 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Zirconium dioxide - as Zr                           | TWA  | 5 mg/m3       | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
|   | STEL | 10 mg/m3      | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(11 2010)   |
| Zirconium dioxide - as Zr                           | TWA  | 5 mg/m3       | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
|   | STEL | 10 mg/m3      | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Hydrotreated heavy<br>naphthenic distillate - Mist. | TWA  | 0.2 mg/m3     | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |
|   | TWA  | 1 mg/m3       | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (05 2013) |



| Hydrotreated heavy<br>naphthenic distillate -<br>Inhalable fraction.  | TWA  | 5 mg/m3     | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
|---|------|-------------|--|
|   | TWA  | 5 mg/m3     | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Hydrotreated heavy<br>naphthenic distillate - Mist.                   | STEL | 10 mg/m3    | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
|   | TWA  | 5 mg/m3     | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |
| Crystalline Silica (Quartz)/<br>Silica Sand - Respirable<br>fraction. | TWA  | 0.025 mg/m3 | Canada. British Columbia OELs. (Occupational<br>Exposure Limits for Chemical Substances,<br>Occupational Health and Safety Regulation<br>296/97, as amended) (07 2007) |
| Crystalline Silica (Quartz)/<br>Silica Sand - Respirable<br>fraction. | TWA  | 0.10 mg/m3  | Canada. Ontario OELs. (Control of Exposure to<br>Biological or Chemical Agents), as amended<br>(06 2015)   |
| Crystalline Silica (Quartz)/<br>Silica Sand - Respirable dust.        | TWA  | 0.1 mg/m3   | Canada. Quebec OELs. (Ministry of Labor -<br>Regulation Respecting the Quality of the Work<br>Environment), as amended (09 2017)                                       |

#### Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

#### Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc. Eye/face protection: Wear safety glasses with side shields (or goggles). Skin Protection Hand Protection: Use suitable protective gloves if risk of skin contact. Other: Wear suitable protective clothing. **Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

#### 9. Physical and chemical properties

#### Appearance

| Physical state: | liquid             |
|-----------------|--------------------|
| Form:           | Paste              |
| Color:          | Gray               |
| Odor:           | Mild               |
| Odor threshold: | No data available. |

EUCLID CHEMICAL

| pH:   | No data available.  |
|---|---|
| Melting point/freezing point:               | No data available.  |
| Initial boiling point and boiling range:    | No data available.  |
| Flash Point:                                |   |
|   | Not applicable  |
| Evaporation rate:                           | Slower than Ether   |
| Flammability (solid, gas):                  | No  |
| Upper/lower limit on flammability or explos | ive limits  |
| Flammability limit - upper (%):             | No data available.  |
| Flammability limit - lower (%):             | No data available.  |
| Explosive limit - upper (%):                | No data available.  |
| Explosive limit - lower (%):                | No data available.  |
| Vapor pressure:                             | No data available.  |
| Vapor density:                              | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| Relative density:                           | 1.71  |
| Solubility(ies)                             |   |
| Solubility in water:                        | Practically Insoluble   |
| Solubility (other):                         | No data available.  |
| Partition coefficient (n-octanol/water):    | No data available.  |
|   |   |
| Auto-ignition temperature:                  | No data available.  |
| Decomposition temperature:                  | No data available.  |
| Viscosity:                                  | No data available.  |
|   |   |

# 10. Stability and reactivity

| Reactivity:                          | No data available.  |
|--------------------------------------|---|
| Chemical Stability:                  | Material is stable under normal conditions.   |
| Possibility of hazardous reactions:  | No data available.  |
| Conditions to avoid:                 | Avoid heat or contamination.  |
| Incompatible Materials:              | Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates).                |
| Hazardous Decomposition<br>Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

# 11. Toxicological information

| Information on likely routes of e<br>Inhalation: | <b>xposure</b><br>In high concentrations, vapors, fumes or mists may irritate nose, throat and<br>mucus membranes. |
|--|--|
| Skin Contact:                                    | May be harmful in contact with skin.   |
| Eye contact:                                     | Eye contact is possible and should be avoided.   |
|  | 10/00  |



| Ingestion:   | May be ingested by accident. Ingestion may cause irritation and malaise. |  |  |  |
|--|--|--|--|--|
| Symptoms related to the physical, chemical and toxicological characteristics |  |  |  |  |
| Inhalation:  | No data available.   |  |  |  |
| Skin Contact:  | No data available.   |  |  |  |
| Eye contact:   | No data available.   |  |  |  |
| Ingestion:   | No data available.   |  |  |  |
| Information on toxicological effe  | ects   |  |  |  |
| Acute toxicity (list all possible  | e routes of exposure)  |  |  |  |
| Oral<br>Product:   | Not classified for acute toxicity based on available data.               |  |  |  |
| Dermal<br>Product:   | Not classified for acute toxicity based on available data.               |  |  |  |
| Inhalation<br>Product:   | ATEmix: 4.24 mg/l  |  |  |  |
| Repeated dose toxicity<br>Product:   | No data available.   |  |  |  |
| Skin Corrosion/Irritation<br>Product:  | No data available.   |  |  |  |
| Serious Eye Damage/Eye Irritat<br>Product:                                   | ion<br>No data available.  |  |  |  |
| Respiratory or Skin Sensitizatio<br>Product:                                 | n<br>No data available.  |  |  |  |
| Carcinogenicity<br>Product:  | No data available.   |  |  |  |



#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans. Carbon Black Overall evaluation: Possibly carcinogenic to humans. Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall Hydrotreated heavy naphthenic distillate evaluation: Carcinogenic to humans. US. National Toxicology Program (NTP) Report on Carcinogens: Hydrotreated heavy Known To Be Human Carcinogen. naphthenic distillate US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified **Germ Cell Mutagenicity** In vitro **Product:** No data available. In vivo **Product:** No data available. **Reproductive toxicity** Product: No data available.

- Specific Target Organ Toxicity Single Exposure Product: No data available.
- Specific Target Organ Toxicity Repeated Exposure Product: No data available.
- Aspiration Hazard Product: No data available. Other effects: No data available.

#### 12. Ecological information

**Ecotoxicity:** 

Acute hazards to the aquatic environment:

Fish Product:

No data available.

#### **Aquatic Invertebrates**

Version: 1.2 Revision Date: 09/30/2019



| Product:  | No data available.  |
|---|---|
| Chronic hazards to the aquat  | ic environment:   |
| Fish<br>Product:  | No data available.  |
| Aquatic Invertebrates<br>Product:                                   | No data available.  |
| Toxicity to Aquatic Plants<br>Product:                              | No data available.  |
| Persistence and Degradability                                       |   |
| Biodegradation<br>Product:  | No data available.  |
| BOD/COD Ratio<br>Product:   | No data available.  |
| Bioaccumulative potential<br>Bioconcentration Factor (B<br>Product: | CF)<br>No data available.   |
| Partition Coefficient n-octanol /<br>Product:                       | water (log Kow)<br>No data available.   |
| Mobility in soil:   | No data available.  |
| Other adverse effects:  | Very toxic to aquatic organisms.  |
| 13. Disposal considerations   |   |
| Disposal methods:   | Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Contaminated Packaging:   | No data available.  |
|   |   |

# 14. Transport information

# TDG:

Not Regulated

# CFR / DOT:

Not Regulated



#### IMDG:

Not Regulated

### 15. Regulatory information

#### **US Federal Regulations**

# TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

# US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Chemical Identity     | OSHA hazard(s)        |
|-----------------------|-----------------------|
| Crystalline Silica    | kidney effects        |
| (Quartz)/ Silica Sand | lung effects          |
|                       | immune system effects |
|                       | Cancer                |

#### CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard Acute toxicity (any route or exposure) Carcinogenicity

## SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

#### SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Diisodecyl phthalate Diisodecyl phthalate (mixed Is)



#### SARA 311/312 Hazardous Chemical Chemical Identity Threshold Planning Quantity

| Chemical Identity     | Threshold |
|-----------------------|-----------|
| Titanium dioxide      | 10000 lbs |
| Diisodecyl phthalate  | 10000 lbs |
| Carbon Black          | 10000 lbs |
| Calcium oxide         | 10000 lbs |
| Aluminum oxide        | 10000 lbs |
| Iron oxide            | 10000 lbs |
| Amorphous silica      | 10000 lbs |
| Zirconium dioxide     | 10000 lbs |
| Hydrotreated heavy    | 10000 lbs |
| naphthenic distillate |           |

### SARA 313 (TRI Reporting)

Chemical Identity

Aluminum oxide

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) None present or none present in regulated quantities.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

WARNING

None present or none present in regulated quantities.

#### **US State Regulations**

#### US. California Proposition 65



Cancer and Reproductive Harm - www.P65Warnings.ca.gov

#### US. New Jersey Worker and Community Right-to-Know Act

#### Chemical Identity

Titanium dioxide Carbon Black Calcium oxide Aluminum oxide Hydrotreated heavy naphthenic distillate

#### **US. Massachusetts RTK - Substance List**

<u>Chemical Identity</u> Titanium dioxide Carbon Black Aluminum oxide Crystalline Silica (Quartz)/ Silica Sand

### US. Pennsylvania RTK - Hazardous Substances

**Chemical Identity** Titanium dioxide Diisodecyl phthalate Carbon Black Calcium oxide Aluminum oxide



#### US. Rhode Island RTK

Chemical Identity

Titanium dioxide Carbon Black Aluminum oxide

# International regulations

## Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### Rotterdam convention

Not applicable

# Kyoto protocol

Not applicable

### VOC:

| Regulatory VOC (less water and exempt solvent) | : | 1 g/l  |
|--|---|--------|
| VOC Method 310                                 | : | 0.03 % |



| Inventory Status:<br>Australia AICS:     | One or more components in this product are not listed on or exempt from the Inventory. |
|--|--|
| Canada DSL Inventory List:               | All components in this product are listed on or exempt from the Inventory.             |
| EINECS, ELINCS or NLP:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI):    | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory:                   | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory:                       | All components in this product are listed on or exempt from the Inventory.             |
| New Zealand Inventory of Chemicals:      | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing:                      | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing:             | One or more components in this product are not listed on or exempt from the Inventory. |
| Mexico INSQ:                             | One or more components in this product are not listed on or exempt from the Inventory. |
| Ontario Inventory:                       | One or more components in this product are not listed on or exempt from the Inventory. |
| Taiwan Chemical Substance Inventory:     | One or more components in this product are not listed on or exempt from the Inventory. |



# 16.Other information, including date of preparation or last revision

| Revision Date:       | 09/30/2019   |
|----------------------|--|
| Version #:           | 1.2  |
| Further Information: | No data available.   |
| Disclaimer:          | For Industrial Use Only. Keep out of Reach of Children. The hazard<br>information herein is offered solely for the consideration of the user, subject<br>to their own investigation of compliance with applicable regulations, including<br>the safe use of the product under every foreseeable condition. |