



## Safety Data Sheet

### Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1 Product identifier

##### Product Name

- **NinjaFlex 3D Printing Filament; SemiFlex 3D Printing Filament; Cheetah 3D Printing Filament (all colors- Snow, Midnight, Sapphire, Fire, Sun, Lava, Grass, Flamingo, Water, Silver Metallic, Gold Metallic, Almond, Blush, Caramel, Concrete, Hunter, Mocha, Sky, Mustard, Violet, Marsala, Orchid, Emerald, Peach)**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)
- Filament for 3D Printing

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer

- Fenner Drives  
311 W Stiegel Street  
Manheim, PA 17545-1747  
United States  
www.fennerdrives.com

Telephone (General) • (717) 664-8314

#### 1.4 Emergency telephone number

- Manufacturer
- (717) 665-2421 - (Monday-Friday, 8:00 AM-5:00PM EST)

### Section 2: Hazards Identification

#### EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

#### 2.1 Classification of the substance or mixture

##### CLP

- The solid material as shipped and sold is not hazardous and is not expected to cause irritation. Hazardous air contaminants may occur during decomposition such as in the printing process  
Germ Cell Mutagenicity 2 - H341  
Carcinogenicity 2 - H351

##### DSD/DPD

- The solid material as shipped and sold is not hazardous and is not expected to cause irritation. Hazardous air contaminants may occur during decomposition such as in the printing process  
Carcinogenic Substances - Category 3  
Mutagenic Substances - Category 3  
R40, R68

#### 2.2 Label Elements

##### CLP

**WARNING**



- Hazard statements** • H341 - Suspected of causing genetic defects.  
H351 - Suspected of causing cancer.

### Precautionary statements

- Prevention** • P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P281 - Use personal protective equipment as required.
- Response** • P308+P313 - IF exposed or concerned: Get medical advice/attention.
- Storage/Disposal** • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

### DSD/DPD



- Risk phrases** • R40 - Limited evidence of a carcinogenic effect.  
R68 - Possible risk of irreversible effects.
- Safety phrases** • S36 - Wear suitable protective clothing.  
S37 - Wear suitable gloves.  
S53 - Avoid exposure - obtain special instructions before use.

## 2.3 Other Hazards

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous during the printing process.

- DSD/DPD** • According to European Directive 1999/45/EC this material is not considered dangerous.  
According to European Directive 1999/45/EC this material is considered dangerous during the printing process.

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## United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

### 2.1 Classification of the substance or mixture

- OSHA HCS 2012** • The solid material as shipped and sold is not hazardous and is not expected to cause irritation. Hazardous air contaminants may occur during decomposition such as in the printing process  
Germ Cell Mutagenicity 2  
Carcinogenicity 2  
Specific Target Organ Toxicity Repeated Exposure 2

### 2.2 Label elements

**OSHA HCS 2012**

#### WARNING



- Hazard statements** • Suspected of causing genetic defects.  
Suspected of causing cancer.

### Precautionary statements

- Prevention** • Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.
- Response** • IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

- Storage/Disposal**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other hazards

### OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

According to: WHMIS

## 2.1 Classification of the substance or mixture

### WHMIS

- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

## 2.2 Label elements

### WHMIS



- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

## 2.3 Other hazards

### WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### 3.1 Substances

- Material does not meet the criteria of a substance.

### 3.2 Mixtures

The information provided about the pigments and additives applies to their pure dry form. The form of the pigment and additive provided to customers is encapsulated in plastic; therefore, the likelihood of exposure to any of the pigments and additives during product use is much less, even to the point of negligible.

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Thermoplastic urethane	NDA	95% TO 99.3%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	All Colors
Titanium dioxide	CAS:13463-67-7 EC Number:236-675-5	< 1.01%	NDA	EU DSD/DPD: Mut. Cat. 3, Xn, R68; Carc. Cat. 3, Xn, R40-48/20 EU CLP: Muta. 2, H341; Carc. 2, H351; STOT RE 2 (Lungs), H373 OSHA HCS 2012: Muta. 2;	Snow, Sapphire, Sun, Lava, Grass, Flamingo, Almond, Blush, Caramel, Concrete, Hunter, Mocha, Sky, Mustard, Violet, Marsala, Orchid, Emerald, Peach

				Carc. 2; STOT RE 2 (Lungs)	
Limestone	<b>CAS:</b> 1317-65-3 <b>EC Number:</b> 215-279-6	< 0.3015%	NDA	<b>EU DSD/DPD:</b> Not Classified <b>EU CLP:</b> Not Classified <b>OSHA HCS 2012:</b> Not Classified	Fire, Concrete, Violet
Ethylene-bis-stearamide	<b>CAS:</b> 110-30-5 <b>EINECS:</b> 203-755-6	< 0.2%	NDA	<b>EU DSD/DPD:</b> Not Classified <b>EU CLP:</b> Not Classified <b>OSHA HCS 2012:</b> Comb. Dust	Midnight, Sapphire, Fire, Caramel, Concrete, Violet
C.I. Pigment Brown 24	<b>CAS:</b> 68186-90-3 <b>EINECS:</b> 269-052-1	< 0.1654%	NDA	<b>EU DSD/DPD:</b> Not Classified <b>EU CLP:</b> Not Classified <b>OSHA HCS 2012:</b> Not Classified	Hunter, Mocha, Orchid
Iron oxide	<b>CAS:</b> 1309-37-1 <b>EC Number:</b> 215-168-2	< 0.1124%	NDA	<b>EU DSD/DPD:</b> Not Classified <b>EU CLP:</b> Not Classified <b>OSHA HCS 2012:</b> Not Classified	Almond, Mocha, Mustard, Marsala
CHROMIUM (III) COMPOUND	NDA	< 0.1%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Hunter, Mocha, Orchid
ANTIMONY & COMPOUNDS (AS SB)	NDA	< 0.1%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Hunter, Mocha, Orchid
Silica, amorphous	<b>CAS:</b> 7631-86-9 <b>EC Number:</b> 231-545-4	< 0.0444%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Snow, Sapphire, Lava, Grass, Flamingo, Mocha, Mustard, Marsala, Emerald
Carbon Black	<b>CAS:</b> 1333-86-4 <b>EC Number:</b> 215-609-9	< 0.044%	Ingestion/Oral-Rat LD50 • >15400 mg/kg Skin-Rabbit LD50 • >3 g/kg	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Midnight, Caramel, Concrete, Hunter, Mocha, Sky, Violet, Marsala
Aluminum oxide	<b>CAS:</b> 1344-28-1 <b>EC Number:</b> 215-691-6	< 0.0282%	Inhalation-Rat LC50 • 0.2 mg/L 5 Hour(s) 28 Week(s)	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Snow, Sun, Lava, Grass, Caramel, Concrete, Mocha, Mustard, Violet, Marsala, Orchid, Emerald, Peach
Chromium(III) oxide	<b>CAS:</b> 1308-38-9 <b>EC Number:</b> 215-160-9	< 0.02256%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Concrete
C.I. Pigment Black 28	<b>CAS:</b> 68186-91-4 <b>EC Number:</b> 269-053-7	< 0.0204%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Snow, Grass, Blush, Mustard
Zirconium oxide	<b>CAS:</b> 1314-23-4 <b>EC Number:</b> 215-227-2	< 0.008%	NDA	<b>EU CLP:</b> Community workplace exposure limit <b>OSHA HCS 2012:</b> Exposure limits	Snow, Lava, Grass, Mocha, Mustard, Marsala, Emerald

Aluminum hydroxide (Al (OH)3)	CAS:21645-51-2 EC Number:244-492-7	< 0.0077%	NDA	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limits	Sapphire, Flamingo, Almond, Blush, Hunter, Sky
Stearic acid	CAS:57-11-4 EC Number:200-313-4	< 0.006%	Skin-Rabbit LD50 • >5g/kg Ingestion/Oral-Rat LD50 • 4600 mg/kg	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limits	Fire, Concrete, Violet
Kaolin	CAS:1332-58-7	< 0.0015%	NDA	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limits	Flamingo
Quartz	CAS:14808-60-7 EC Number:238-878-4	< 0.0009%	NDA	EU CLP: Community workplace exposure limit OSHA HCS 2012: Exposure limits	Fire, Concrete, Violet

See Section 16 for full text of H-statements and R-phrases.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures

#### Inhalation

- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention.

#### Skin

- In case of contact with melted filament, immediately flush skin with running water for at least 20 minutes.

#### Eye

- In case of contact with melted filament, immediately flush eyes with running water for at least 20 minutes. Get medical attention.

#### Ingestion

- Not a likely route of exposure. First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

### 4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

- No specific actions or treatments recommended related to exposure to this material.

## Section 5 - Firefighting Measures

### 5.1 Extinguishing media

#### Suitable Extinguishing Media

- LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

#### Unsuitable Extinguishing Media

- No data available.

### 5.2 Special hazards arising from the substance or mixture

#### Unusual Fire and Explosion Hazards

- Some may burn, but none ignite readily.

#### Hazardous Combustion Products

- Carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen oxides, isocyanate.

### 5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA).  
Structural firefighters' protective clothing will only provide limited protection.

## Section 6 - Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Do not walk through spilled material. Spilled material may cause a tripping hazard. Wear appropriate personal protective equipment.
- Emergency Procedures**
- No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended.

### 6.2 Environmental precautions

- No special environmental precautions expected to be necessary.

### 6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- In the event of a spill use normal housekeeping or clean-up.

### 6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling

- Handling**
- Use only in well ventilated areas. Use good safety and industrial hygiene practices. Under hot melt processing conditions, wear personal protective equipment to prevent thermal burns. Do not breathe dust. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

### 7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Keep container closed. Store in original containers at ambient environmental conditions. Protect against excessive heat and moisture. Store separately from food products.

### 7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

### 8.1 Control parameters

- Exposure Limits/Guidelines**
- The information provided about the pigments and additives applies to their pure dry form. The form of the pigment and additive provided to customers is encapsulated in plastic; therefore, the likelihood of exposure to any of the pigments and additives during product use is much less, even to the point of negligible.

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	China	Germany DFG
	STELs	Not established	Not established	Not established	2 mg/m3 STEL (containing 10-50% free SiO <sub>2</sub> , total dust); 1.4 mg/m3 STEL (containing 50-80% free SiO <sub>2</sub> , total dust); 1 mg/m3 STEL (containing >80% free SiO <sub>2</sub> , total dust); 1.4 mg/m3 STEL (containing 10-50% free SiO <sub>2</sub> , respirable)	Not established

Quartz (14808-60-7)					dust); 0.6 mg/m3 STEL (containing 50-80% free SiO2, respirable dust); 0.4 mg/m3 STEL (containing >80% free SiO2, respirable dust)	
	TWAs	0.025 mg/m3 TWA (respirable fraction)	0.10 mg/m3 TWA (designated substances regulation, respirable, listed under Silica, crystalline)	0.1 mg/m3 TWAEV (respirable dust)	0.7 mg/m3 TWA (containing 50-80% free SiO2, total dust); 0.3 mg/m3 TWA (containing 50-80% free SiO2, respirable dust); 1 mg/m3 TWA (containing 10-50% free SiO2, total dust); 0.7 mg/m3 TWA (containing 10-50% free SiO2, respirable dust); 0.5 mg/m3 TWA (containing >80% free SiO2, total dust); 0.2 mg/m3 TWA (containing >80% free SiO2, respirable dust)	Not established
Kaolin (1332-58-7)	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	2 mg/m3 TWA (containing no Asbestos and <1% Crystalline silica, respirable)	5 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, respirable dust)	Not established	Not established
Aluminum hydroxide (Al(OH)3) (21645-51-2)	TWAs	1 mg/m3 TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	1 mg/m3 TWA (respirable) <i>as Aluminum insoluble compounds</i>	Not established	Not established	Not established
	MAKs	Not established	Not established	Not established	Not established	4 mg/m3 TWA MAK (dust, inhalable fraction); 1.5 mg/m3 TWA MAK (dust, respirable fraction)
Zirconium oxide	STELs	10 mg/m3 STEL (as Zr) <i>as Zirconium compounds</i>	10 mg/m3 STEL (as Zr) <i>as Zirconium compounds</i>	10 mg/m3 STEV (as Zr) <i>as Zirconium compounds</i>	10 mg/m3 STEL (as Zr) <i>as Zirconium compounds</i>	Not established
	TWAs	5 mg/m3 TWA (as Zr) <i>as Zirconium compounds</i>	5 mg/m3 TWA (as Zr) <i>as Zirconium compounds</i>	5 mg/m3 TWAEV (as Zr) <i>as Zirconium compounds</i>	5 mg/m3 TWA (as Zr) <i>as Zirconium compounds</i>	Not established
			0.5 mg/m3 TWA (as			

Chromium(III) oxide	TWAs	0.5 mg/m <sup>3</sup> TWA (as Cr) <i>as Chromium (III) inorganic compounds</i>	Cr, listed under Chromium and inorganic compounds <i>as Chromium(III) compounds</i>	0.5 mg/m <sup>3</sup> TWAEV (as Cr) <i>as Chromium(III) compounds</i>	Not established	Not established
Aluminum oxide (1344-28-1)	STELs	Not established	Not established	Not established	8 mg/m <sup>3</sup> STEL (total dust)	Not established
	TWAs	1 mg/m <sup>3</sup> TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	1 mg/m <sup>3</sup> TWA (respirable) <i>as Aluminum insoluble compounds</i>	10 mg/m <sup>3</sup> TWAEV (containing no Asbestos and <1% Crystalline silica, total dust, as Al)	4 mg/m <sup>3</sup> TWA (total dust)	Not established
	MAKs	Not established	Not established	Not established	Not established	4 mg/m <sup>3</sup> TWA MAK (dust, inhalable fraction); 1.5 mg/m <sup>3</sup> TWA MAK (dust, respirable fraction)
Carbon Black (1333-86-4)	STELs	Not established	Not established	Not established	8 mg/m <sup>3</sup> STEL (total dust)	Not established
	TWAs	3 mg/m <sup>3</sup> TWA (inhalable fraction)	3 mg/m <sup>3</sup> TWA (inhalable)	3.5 mg/m <sup>3</sup> TWAEV	4 mg/m <sup>3</sup> TWA (total dust)	Not established
Silica, amorphous (7631-86-9)	MAKs	Not established	Not established	Not established	Not established	4 mg/m <sup>3</sup> TWA MAK (inhalable fraction)
Iron oxide (1309-37-1)	TWAs	5 mg/m <sup>3</sup> TWA (respirable fraction)	5 mg/m <sup>3</sup> TWA (respirable)	5 mg/m <sup>3</sup> TWAEV (dust and fume, as Fe); 10 mg/m <sup>3</sup> TWAEV (containing no Asbestos and <1% Crystalline silica, regulated under Rouge, total dust)	Not established	Not established
Limestone (1317-65-3)	STELs	Not established	Not established	Not established	16 mg/m <sup>3</sup> STEL (total dust); 8 mg/m <sup>3</sup> STEL (respirable dust)	Not established
	TWAs	Not established	Not established	10 mg/m <sup>3</sup> TWAEV (Limestone, containing no Asbestos and <1% Crystalline silica, total dust)	8 mg/m <sup>3</sup> TWA (total dust); 4 mg/m <sup>3</sup> TWA (respirable dust)	Not established
Titanium dioxide (13463-67-7)	STELs	Not established	Not established	Not established	16 mg/m <sup>3</sup> STEL (total dust)	Not established
	TWAs	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWAEV (containing no Asbestos and <1% Crystalline silica, total dust)	8 mg/m <sup>3</sup> TWA (total dust)	Not established

**Exposure Limits/Guidelines (Cont.)**

	Result	Germany TRGS	NIOSH	OSHA
Quartz (14808-60-7)	TWAs	Not established	0.05 mg/m <sup>3</sup> TWA (respirable dust)	Not established



Kaolin (1332-58-7)	TWAs	Not established	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)
Zirconium oxide	TWAs	Not established	5 mg/m <sup>3</sup> TWA (except Zirconium tetrachloride, as Zr)  <i>as Zirconium compounds</i>	5 mg/m <sup>3</sup> TWA (as Zr)  <i>as Zirconium compounds</i>
	STELs	Not established	10 mg/m <sup>3</sup> STEL (except Zirconium tetrachloride, as Zr)  <i>as Zirconium compounds</i>	Not established
Chromium(III) oxide	TWAs	2 mg/m <sup>3</sup> TWA AGW (inhalable fraction, exposure factor 1, listed under Chromium)  <i>as Chromium (III) inorganic compounds</i>	0.5 mg/m <sup>3</sup> TWA (as Cr)  <i>as Chromium(III) compounds</i>	0.5 mg/m <sup>3</sup> TWA (as Cr)  <i>as Chromium(III) compounds</i>
Aluminum oxide (1344-28-1)	TWAs	Not established	Not established	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)
Carbon Black (1333-86-4)	TWAs	Not established	3.5 mg/m <sup>3</sup> TWA; 0.1 mg/m <sup>3</sup> TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)	3.5 mg/m <sup>3</sup> TWA
Silica, amorphous (7631-86-9)	TWAs	4 mg/m <sup>3</sup> TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, inhalable fraction)	6 mg/m <sup>3</sup> TWA	Not established
Iron oxide (1309-37-1)	TWAs	Not established	5 mg/m <sup>3</sup> TWA (dust and fume, as Fe)	10 mg/m <sup>3</sup> TWA (fume); 15 mg/m <sup>3</sup> TWA (total dust, listed under Rouge); 5 mg/m <sup>3</sup> TWA (respirable fraction, listed under Rouge)
Limestone (1317-65-3)	TWAs	Not established	10 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable dust)	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)
Titanium dioxide (13463-67-7)	TWAs	Not established	Not established	15 mg/m <sup>3</sup> TWA (total dust)

## Exposure Control Notations

### Canada Ontario

•Quartz (14808-60-7): **Designated Substances:** (0.10 mg/m<sup>3</sup> TWA (respirable fraction, listed under Silica, crystalline))

### Canada Quebec

•Quartz (14808-60-7): **Carcinogens:** (C2 carcinogen - effect suspected in humans)

### ACGIH

- Chromium(III) oxide as Chromium (III) inorganic compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Iron oxide (1309-37-1): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Zirconium oxide as Zirconium compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Kaolin (1332-58-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Carbon Black (1333-86-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
- Aluminum oxide as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Titanium dioxide (13463-67-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Quartz (14808-60-7): **Carcinogens:** (A2 - Suspected Human Carcinogen)
- Aluminum hydroxide (Al(OH)<sub>3</sub>) as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

#### Germany DFG

- Chromium(III) oxide as Chromium(III) compounds: **Sensitizers:** (skin sensitizer)
- Iron oxide (1309-37-1): **Carcinogens:** (Category 3B (could be carcinogenic for man, with the exception of non-bioavailable ferrous oxides))
- Kaolin (1332-58-7): **Carcinogens:** (Category 3B (could be carcinogenic for man))
- Carbon Black (1333-86-4): **Carcinogens:** (Category 3B (could be carcinogenic for man, inhalable fraction))
- Aluminum oxide (1344-28-1): **Carcinogens:** (Category 2 (considered to be carcinogenic for man, fibre dust)) | **Pregnancy:** (classification not yet possible (respirable, inhalable, dust))
- Titanium dioxide (13463-67-7): **Carcinogens:** (Category 3A (could be carcinogenic for man, inhalable fraction with the exception of ultra small particles))
- Quartz (14808-60-7): **Carcinogens:** (Category 1 (causes cancer in man, alveola fraction))
- Aluminum hydroxide (Al(OH)<sub>3</sub>) (21645-51-2): **Pregnancy:** (classification not yet possible (respirable, inhalable, dust))
- Silica, amorphous (7631-86-9): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

## Exposure Limits Supplemental

### OSHA

- Quartz (14808-60-7): **Mineral Dusts:** ((30)/(%SiO<sub>2</sub> + 2) mg/m<sup>3</sup> TWA, total dust; (250)/(%SiO<sub>2</sub> + 5) mppcf TWA, respirable fraction; (10)/(%SiO<sub>2</sub> + 2) mg/m<sup>3</sup> TWA, respirable fraction)
- Silica, amorphous (7631-86-9): **Mineral Dusts:** (20 mppcf TWA; (80)/(% SiO<sub>2</sub>) mg/m<sup>3</sup> TWA)

### ACGIH

- Chromium(III) oxide as Chromium (III) inorganic compounds: **TLV Basis - Critical Effects:** (skin and upper respiratory tract irritation)
- Iron oxide (1309-37-1): **TLV Basis - Critical Effects:** (pneumoconiosis)
- Kaolin (1332-58-7): **TLV Basis - Critical Effects:** (pneumoconiosis)
- Carbon Black (1333-86-4): **TLV Basis - Critical Effects:** (bronchitis)
- Aluminum oxide as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)
- Titanium dioxide (13463-67-7): **TLV Basis - Critical Effects:** (lower respiratory tract irritation) | **Notice of Intended Changes (TLVs):** (Withdrawn from notice of intended changes)
- Quartz (14808-60-7): **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)
- Aluminum hydroxide (Al(OH)<sub>3</sub>) as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)

## 8.2 Exposure controls

### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Provide suitable exhaust ventilation in the area surrounding the melt outlet of fused deposition modeling printer.

### Personal Protective Equipment

#### Respiratory

- For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

#### Eye/Face

- Wear safety goggles.

#### Skin/Body

- Wear appropriate gloves to prevent burns.

### Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene  
 MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration  
 NIOSH = National Institute of Occupational Safety and Health  
 OSHA = Occupational Safety and Health Administration  
 STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value  
 TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)  
 TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures  
 TWAEV = Time-Weighted Average Exposure Value

## Section 9 - Physical and Chemical Properties

### 9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Various colored solid filament with no odor.
Color	Various Colors (White, Black, Blue, Red, Yellow, Orange, Green, Pink, Silver, Gold, Tan, Brown, Gray, Purple)	Odor	Odorless
Odor Threshold	Not relevant		
General Properties			
Boiling Point	Not relevant	Melting Point/Freezing Point	> 120 C(> 248 F)
Decomposition Temperature	> 230 C(> 446 F)	pH	Not relevant
Specific Gravity/Relative Density	= 1.2 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	Not relevant	Explosive Properties	Not relevant
Oxidizing Properties:	Not relevant		
Volatility			
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant		
Flammability			
Flash Point	> 400 C(> 752 F)	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant		
Environmental			
Octanol/Water Partition coefficient	Not relevant		

### 9.2 Other Information

- No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

### 10.3 Possibility of hazardous reactions

- Hazardous polymerization not indicated.

### 10.4 Conditions to avoid

- None known.

## 10.5 Incompatible materials

- None known.

## 10.6 Hazardous decomposition products

- Thermal decomposition or combustion may liberate carbon monoxide, carbon dioxide, and other toxic gases and vapors. May also include isocyanates and small amount of hydrogen cyanide.

## Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

#### Other Material Information

- The solid material as shipped and sold is not hazardous and is not expected to cause irritation. Hazardous air contaminants may occur during decomposition such as in the printing process. The information provided about the pigments and additives applies to their pure dry form. The form of the pigment and additive provided to customers is encapsulated in plastic; therefore, the likelihood of exposure to any of the pigments and additives during product use is much less, even to the point of negligible.

Components		
Titanium dioxide (< 1.01%)	13463-67-7	<p><b>Irritation:</b> Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation;</p> <p><b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 10 mg/m<sup>3</sup> 6 Hour(s) 13 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i><b>Fibrosis (interstitial); Lungs, Thorax, or Respiration:Other changes; Biochemical:Metabolism (intermediary):Effect on inflammation or mediation of inflammation;</b> Inhalation-Rat TClO • 250 mg/m<sup>3</sup> 6 Hour(s) 4 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i><b>Chronic pulmonary edema; Lungs, Thorax, or Respiration:Other changes;</b></p> <p><b>Mutagen:</b> Cytogenetic analysis • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent; Micronucleus test • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent; DNA damage • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent;</p> <p><b>Tumorigen / Carcinogen:</b> Inhalation-Rat • 10 mg/m<sup>3</sup> 18 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:</i><b>Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors;</b> Inhalation-Rat TClO • 250 mg/m<sup>3</sup> 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:</i><b>Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</b></p>

GHS Properties	Classification
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 2
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2

<b>STOT-SE</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>Toxicity for Reproduction</b>	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
<b>Germ Cell Mutagenicity</b>	EU/CLP • Germ Cell Mutagenicity 2 OSHA HCS 2012 • Germ Cell Mutagenicity 2

## Potential Health Effects

### Inhalation

- Acute (Immediate)** • Exposure to heated material may cause irritation to the mucous membranes and upper respiratory tract.
- Chronic (Delayed)** • No data available.

### Skin

- Acute (Immediate)** • Exposure to dust may cause mechanical irritation. Contact with hot molten substance/product may cause thermal burns.
- Chronic (Delayed)** • No data available.

### Eye

- Acute (Immediate)** • No data available
- Chronic (Delayed)** • No data available.

### Ingestion

- Acute (Immediate)** • Not a likely route of exposure.
- Chronic (Delayed)** • Not a likely route of exposure.

### Other

- Chronic (Delayed)** • Repeated and prolonged exposure to titanium dioxide may cause damage to the lungs. However this ingredient is encapsulated in the plastic therefore the likelihood of exposure to the titanium dioxide is expected to be minimal.

### Mutagenic Effects

- Studies with animals have show that repeated and prolonged exposure to titanium dioxide may cause mutagenic effects. However this ingredient is encapsulated in the plastic therefore the likelihood of exposure to the titanium dioxide is expected to be minimal.

### Carcinogenic Effects

- Repeated and prolonged exposure to titanium dioxide may cause cancer. However this ingredient is encapsulated in the plastic therefore the likelihood of exposure to the titanium dioxide is expected to be minimal.

Carcinogenic Effects			
	CAS	IARC	NTP
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen
Carbon Black	1333-86-4	Group 2B-Possible Carcinogen	Not Listed
Titanium dioxide	13463-67-7	Group 2B-Possible Carcinogen	Not Listed

#### Key to abbreviations

TC = Toxic Concentration

## Section 12 - Ecological Information

### 12.1 Toxicity

- Material data lacking.

### 12.2 Persistence and degradability

- Material data lacking.

## 12.3 Bioaccumulative potential

- Material data lacking.

## 12.4 Mobility in Soil

- Material data lacking.

## 12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

## 12.6 Other adverse effects

- No studies have been found.

## Section 13 - Disposal Considerations

### 13.1 Waste treatment methods

#### Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

#### Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

#### 14.6 Special precautions for user

- None specified.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Data lacking. Not hazardous during transport.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### SARA Hazard Classifications

- Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	No	No	No
Aluminum oxide	1344-28-1	Yes	Yes	Yes
C.I. Pigment Black 28	68186-91-4	No	No	No
C.I. Pigment Brown 24	68186-90-3	No	No	No

Carbon Black	1333-86-4	Yes	Yes	Yes
Chromium(III) oxide	1308-38-9	Yes	Yes	No
Ethylene-bis-stearamide	110-30-5	No	No	No
Iron oxide	1309-37-1	Yes	Yes	Yes
Kaolin	1332-58-7	Yes	Yes	Yes
Limestone	1317-65-3	Yes	Yes	Yes
Quartz	14808-60-7	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes	Yes
Stearic acid	57-11-4	No	No	No
Titanium dioxide	13463-67-7	Yes	Yes	Yes
Zirconium oxide	1314-23-4	Yes	No	No

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Yes	No	Yes	Yes	No
Aluminum oxide	1344-28-1	Yes	No	Yes	Yes	No
C.I. Pigment Black 28	68186-91-4	Yes	No	Yes	Yes	No
C.I. Pigment Brown 24	68186-90-3	Yes	No	Yes	Yes	No
Carbon Black	1333-86-4	Yes	No	Yes	Yes	Yes
Chromium(III) oxide	1308-38-9	Yes	No	Yes	Yes	No
Ethylene-bis-stearamide	110-30-5	Yes	No	Yes	Yes	No
Iron oxide	1309-37-1	Yes	No	Yes	Yes	No
Kaolin	1332-58-7	Yes	No	Yes	Yes	No
Limestone	1317-65-3	No	Yes	Yes	Yes	No
Quartz	14808-60-7	Yes	No	Yes	Yes	No
Silica, amorphous	7631-86-9	Yes	No	Yes	Yes	No
Stearic acid	57-11-4	Yes	No	Yes	Yes	No
Titanium dioxide	13463-67-7	Yes	No	Yes	Yes	No
Zirconium oxide	1314-23-4	Yes	No	Yes	Yes	No

Inventory (Con't.)				
Component	CAS	Japan ENCS	Korea KECL	TSCA
Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes	Yes
C.I. Pigment Black 28	68186-91-4	Yes	Yes	Yes
C.I. Pigment Brown 24	68186-90-3	Yes	Yes	Yes
Carbon Black	1333-86-4	Yes	Yes	Yes
Chromium(III) oxide	1308-38-9	Yes	Yes	Yes

Ethylene-bis-stearamide	110-30-5	Yes	Yes	Yes
Iron oxide	1309-37-1	Yes	Yes	Yes
Kaolin	1332-58-7	Yes	Yes	Yes
Limestone	1317-65-3	Yes	Yes	Yes
Quartz	14808-60-7	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes	Yes
Stearic acid	57-11-4	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	Yes	Yes
Zirconium oxide	1314-23-4	Yes	Yes	Yes

## Australia

### Labor

#### Australia - Work Health and Safety Regulations - Hazardous Substances Requiring Health Monitoring

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Demographic, medical and occupational history; Records of personal exposure; Standardised respiratory questionnaire to be completed; Standardised respiratory function test, for example, FEV <sub>1</sub> , FVC and FEV <sub>1</sub> /FVC; Chest X-ray full size PA view

#### Australia - High Volume Industrial Chemicals List

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	
• Iron oxide	1309-37-1	
• Titanium dioxide	13463-67-7	
• Aluminum oxide	1344-28-1	
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed



- Chromium(III) oxide 1308-38-9
- Quartz 14808-60-7

#### Australia - List of Designated Hazardous Substances - Classification

- Aluminum hydroxide (Al(OH)<sub>3</sub>) 21645-51-2 Not Listed
- C.I. Pigment Black 28 68186-91-4 Not Listed
- Stearic acid 57-11-4 Not Listed
- C.I. Pigment Brown 24 68186-90-3 Not Listed
- Kaolin 1332-58-7 Not Listed
- Carbon Black 1333-86-4 Self classification required
- Iron oxide 1309-37-1 Self classification required (fume)
- Titanium dioxide 13463-67-7 Not Listed
- Aluminum oxide 1344-28-1 Not Listed
- Limestone 1317-65-3 Not Listed
- Silica, amorphous 7631-86-9 Not Listed
- Zirconium oxide 1314-23-4 Not Listed
- Ethylene-bis-stearamide 110-30-5 Not Listed
- Chromium(III) oxide 1308-38-9 Not Listed
- Quartz 14808-60-7 Self classification required

### Environment

#### Australia - National Pollutant Inventory (NPI) Substance List

- Aluminum hydroxide (Al(OH)<sub>3</sub>) 21645-51-2 Not Listed
- C.I. Pigment Black 28 68186-91-4 Not Listed
- Stearic acid 57-11-4 Not Listed
- C.I. Pigment Brown 24 68186-90-3 Not Listed
- Kaolin 1332-58-7 Not Listed
- Carbon Black 1333-86-4 Not Listed
- Iron oxide 1309-37-1 Not Listed
- Titanium dioxide 13463-67-7 Not Listed
- Aluminum oxide 1344-28-1 Not Listed
- Limestone 1317-65-3 Not Listed
- Silica, amorphous 7631-86-9 Not Listed
- Zirconium oxide 1314-23-4 Not Listed
- Ethylene-bis-stearamide 110-30-5 Not Listed
- Chromium(III) oxide 1308-38-9 Not Listed
- Quartz 14808-60-7 Not Listed

#### Australia - Ozone Protection Act - Scheduled Substances

- Aluminum hydroxide (Al(OH)<sub>3</sub>) 21645-51-2 Not Listed
- C.I. Pigment Black 28 68186-91-4 Not Listed
- Stearic acid 57-11-4 Not Listed
- C.I. Pigment Brown 24 68186-90-3 Not Listed
- Kaolin 1332-58-7 Not Listed
- Carbon Black 1333-86-4 Not Listed
- Iron oxide 1309-37-1 Not Listed
- Titanium dioxide 13463-67-7 Not Listed
- Aluminum oxide 1344-28-1 Not Listed
- Limestone 1317-65-3 Not Listed
- Silica, amorphous 7631-86-9 Not Listed
- Zirconium oxide 1314-23-4 Not Listed
- Ethylene-bis-stearamide 110-30-5 Not Listed
- Chromium(III) oxide 1308-38-9 Not Listed

• Quartz	14808-60-7	Not Listed
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**Australia - Priority Existing Chemical Program**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**Canada**

**Labor**

**Canada - WHMIS - Classifications of Substances**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Uncontrolled product according to WHMIS classification criteria
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Uncontrolled product according to WHMIS classification criteria
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	D2A D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Carbon Black, non-respirable on Health Canada's WHMIS Division website.)
• Carbon Black	1333-86-4	Uncontrolled product according to WHMIS classification criteria D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS Division website.)
• Iron oxide	1309-37-1	Uncontrolled product according to WHMIS classification criteria D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS Division website.)
• Titanium dioxide	13463-67-7	Uncontrolled product according to WHMIS classification criteria
• Aluminum oxide	1344-28-1	D2A
• Limestone	1317-65-3	Uncontrolled product according to WHMIS classification criteria
• Silica, amorphous	7631-86-9	D2A

• Zirconium oxide	1314-23-4	Uncontrolled product according to WHMIS classification criteria
• Ethylene-bis-stearamide	110-30-5	Uncontrolled product according to WHMIS classification criteria
• Chromium(III) oxide	1308-38-9	Uncontrolled product according to WHMIS classification criteria
• Quartz	14808-60-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)

#### Canada - WHMIS - Ingredient Disclosure List

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	1 %
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	1 %
• Iron oxide	1309-37-1	1 %
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	1 %
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	1 %
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	1 %
• Quartz	14808-60-7	1 %

### Environment

#### Canada - CEPA - Priority Substances List

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### Europe

## Other

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
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• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**United States**

**Labor**

**U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - OSHA - Specifically Regulated Chemicals**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
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• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

## Environment

### U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

### U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed

• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed

• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	1.0 % de minimis concentration (fibrous forms)
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - EPA - Designated Generic Categories - Pesticides and Other PBTs**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed



• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Toxic Characteristic**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed

• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Part 268 Appendix III - Halogenated Organic Compounds (HOCs)**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed

• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - RCRA (Resource Conservation & Recovery Act) - Waste Minimization Priority Chemicals**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

## United States - California

### Environment

#### U.S. - California - Proposition 65 - Carcinogens List

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)

#### U.S. - California - Proposition 65 - Developmental Toxicity

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

#### U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed

• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Female**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

**U.S. - California - Proposition 65 - Reproductive Toxicity - Male**

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed

• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

## United States - Pennsylvania

### Labor

#### U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

#### U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Aluminum hydroxide (Al(OH) <sub>3</sub> )	21645-51-2	Not Listed
• C.I. Pigment Black 28	68186-91-4	Not Listed
• Stearic acid	57-11-4	Not Listed
• C.I. Pigment Brown 24	68186-90-3	Not Listed
• Kaolin	1332-58-7	Not Listed
• Carbon Black	1333-86-4	
• Iron oxide	1309-37-1	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Aluminum oxide	1344-28-1	Not Listed
• Limestone	1317-65-3	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Zirconium oxide	1314-23-4	Not Listed
• Ethylene-bis-stearamide	110-30-5	Not Listed
• Chromium(III) oxide	1308-38-9	Not Listed
• Quartz	14808-60-7	Not Listed

## 15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

## 15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

## Section 16 - Other Information

### Relevant Phrases (code & full text)

- H373 - May cause damage to organs through prolonged or repeated exposure.  
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.

**Revision Date**

- 05/October/2015

**Preparation Date**

- 15/December/2014

**Disclaimer/Statement of Liability**

- This information relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information is derived from the best available sources and is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use of this product are not within the control of Fenner Drives, it is the user's responsibility to determine the suitability and completeness of this information, and the conditions of safe use of the product, for his own particular use.

**Key to abbreviations**

NDA = No data available

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