

Safety Data Sheet

Firestone Building Products Company

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

1.1 Product identifier

Product Name • AcryliTop™ PC-100 Coating Grey

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

Relevant identified use(s) • Construction

1.3 Details of the supplier of the safety data sheet

Manufacturer • Firestone Building Products Company

200 4th Avenue S
Nashville, TN 37201-2208
United States

firestonemsds@bfdp.com

Telephone (General) • 800-428-4442

1.4 Emergency telephone number

Manufacturer • (800) 424-9300 - CHEMTREC

Manufacturer • (703) 527-3887 - CHEMTREC - International

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 • Hazardous to the aquatic environment Chronic 2 - H411

DSD/DPD • Dangerous to the Environment (N)
R51, R53

2.2 Label Elements

CLP



Hazard statements • H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention • P273 - Avoid release to the environment.

Response • P391 - Collect spillage.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases** • R51 - Toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.

- Safety phrases** • S57 - Use appropriate containment to avoid environmental contamination.

2.3 Other Hazards

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD** • According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012** • Eye Irritation 2
Specific Target Organ Toxicity Single Exposure 1
Specific Target Organ Toxicity Repeated Exposure 1

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Causes serious eye irritation
Causes damage to organs - Kidneys via Ingestion/Oral
Causes damage to organs - Kidneys through prolonged or repeated exposure via Ingestion/Oral

Precautionary statements

- Prevention** • Do not breathe mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear eye/face protection , .
- Response** • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Specific treatment, see supplemental first aid information.
IF exposed: Call POISON CENTER or doctor/physician.
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****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 in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Aluminum hydroxide (Al(OH) 3)	CAS:21645-51-2 EC Number:244-492-7	20% TO 40%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Acrylic polymer blend	NDA	15% TO 30%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Titanium dioxide	CAS:13463-67-7 EC Number:236-675-5	5% TO 10%	NDA	EU DSD/DPD: Self Classified: Mut. Cat. 3 Xn R68 Carc. Cat. 3 Xn R40 EU CLP: Self Classified: Muta. 2, H341; Carc. 2, H351; STOT RE 2, H373 OSHA HCS 2012: Muta. 2; Carc. 2; STOT RE 2 (Lungs)	NDA
Zinc oxide	CAS:1314-13-2 EC Number:215-222-5 EU Index:030-013-00-7	1% TO 5%	NDA	EU DSD/DPD: Annex VI, Table 3.2: N R50-53 EU CLP: Annex VI, Table 3.1: Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Eye Irrit. 2	NDA
Ethylene glycol	CAS:107-21-1 EC Number:203-473-3 EU Index:603-027-00-1	1% TO 5%	Ingestion/Oral-Rat LD50 • 4700 mg/kg Skin-Rabbit LD50 • 9530 µL/kg	EU DSD/DPD: Annex VI, Table 3.2: Xn R22 EU CLP: Annex VI, Table 3.1: Acute Tox. 4*, H302 OSHA HCS 2012: Eye Irrit. 2; STOT SE 1 (Kidney, Oral); STOT RE 1 (Kidney, Oral)	NDA
Carbon Black	CAS:1333-86-4 EC Number:215-609-9	0.1% TO 1%	Ingestion/Oral-Rat LD50 • >15400 mg/kg Skin-Rabbit LD50 • >3 g/kg	EU DSD/DPD: Self Classified: Xn R48/20 Carc. Cat. 3 R40 EU CLP: Self Classified: Carc. 2, H351; STOT RE 1, H372 OSHA HCS 2012: Carc. 2; STOT RE 1 (Lungs, Inhl); Comb. Dust	NDA

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 | <ul style="list-style-type: none">• Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention. |
| Skin | <ul style="list-style-type: none">• In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If irritation develops and persists, get medical attention. |
| Eye | <ul style="list-style-type: none">• In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention. |
| Ingestion | <ul style="list-style-type: none">• Get medical attention immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. |

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

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|---------------------------|--|
| Notes to Physician | <ul style="list-style-type: none">• All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. |
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Section 5 - Firefighting Measures

5.1 Extinguishing media

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| Suitable Extinguishing Media | <ul style="list-style-type: none">• Carbon dioxide, water, water fog, dry chemical, chemical foam. |
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|---------------------------------------|---|
| Unsuitable Extinguishing Media | <ul style="list-style-type: none">• No data available |
|---------------------------------------|---|

5.2 Special hazards arising from the substance or mixture

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|---|---|
| Unusual Fire and Explosion Hazards | <ul style="list-style-type: none">• Product is not considered flammable or combustible. |
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| Hazardous Combustion Products | <ul style="list-style-type: none">• Compounds of carbon, hydrogen, oxygen, including carbon monoxide and zinc. |
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5.3 Advice for firefighters

- Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released.
Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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| Personal Precautions | <ul style="list-style-type: none">• Do not walk through spilled material. Use appropriate Personal Protective Equipment (PPE) Do not breath mist/vapours/spray. Avoid contact with skin and eyes. |
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- | | |
|-----------------------------|---|
| Emergency Procedures | <ul style="list-style-type: none">• Keep unauthorized personnel away. Stay upwind. Stop leak if you can do it without risk. |
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6.2 Environmental precautions

- Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
Contain and/or absorb spill with inert material (e.g. sand, vermiculite).

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 with adequate ventilation. Wear appropriate personal protective equipment. Do not breath mist/vapours/spray. Avoid contact with skin and eyes. Do not ingest. 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 tightly closed. Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources.

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						
	Result	ACGIH	Australia	Belgium	Canada Alberta	Canada British Columbia
Carbon Black (1333-86-4)	TWAs	3 mg/m3 TWA (inhalable fraction)	3 mg/m3 TWA	3.5 mg/m3 TWA	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable)
Zinc oxide (1314-13-2)	STELs	10 mg/m3 STEL (respirable fraction)	10 mg/m3 STEL (fume)	10 mg/m3 STEL (fume)	10 mg/m3 STEL (respirable)	10 mg/m3 STEL (respirable)
	TWAs	2 mg/m3 TWA (respirable fraction)	10 mg/m3 TWA (containing no asbestos and <1% crystalline silica, inhalable dust); 5 mg/m3 TWA (fume)	10 mg/m3 TWA (dust); 5 mg/m3 TWA (fume)	2 mg/m3 TWA (respirable)	2 mg/m3 TWA (respirable)
Ethylene glycol (107-21-1)	STELs	Not established	40 ppm STEL (vapour); 104 mg/m3 STEL (vapour)	Not established	Not established	20 mg/m3 STEL (particulate)
	TWAs	Not established	10 mg/m3 TWA (particulate); 20 ppm TWA (vapour); 52 mg/m3 TWA (vapour)	Not established	Not established	10 mg/m3 TWA (particulate)
	Ceilings	100 mg/m3 Ceiling (aerosol only)	Not established	Not established	100 mg/m3 Ceiling	100 mg/m3 Ceiling (aerosol); 50 ppm Ceiling (vapour)
Titanium dioxide (13463-67-7)	TWAs	10 mg/m3 TWA	10 mg/m3 TWA (containing no asbestos and <1% crystalline silica, inhalable dust)	10 mg/m3 TWA	10 mg/m3 TWA	10 mg/m3 TWA (total dust); 3 mg/m3 TWA (respirable fraction)

Aluminum hydroxide (Al(OH) ₃)	TWAs	1 mg/m ³ TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	Not established	Not established	Not established	1.0 mg/m ³ TWA (respirable) <i>as Aluminum insoluble compounds</i>
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
Carbon Black (1333-86-4)	TWAs	3 mg/m ³ TWA (inhalable fraction)	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA	3 mg/m ³ TWA (inhalable fraction)	3.5 mg/m ³ TWA
	STELs	Not established	Not established	7 mg/m ³ STEL	Not established	7 mg/m ³ STEL
Zinc oxide (1314-13-2)	STELs	10 mg/m ³ STEL (respirable fraction)	10 mg/m ³ STEL (fume)	10 mg/m ³ STEL (fume)	10 mg/m ³ STEL (respirable fraction)	10 mg/m ³ STEL (fume)
	TWAs	2 mg/m ³ TWA (respirable fraction)	10 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, dust); 5 mg/m ³ TWA (fume)	5 mg/m ³ TWA (fume); 5 mg/m ³ TWA (dust, respirable mass); 10 mg/m ³ TWA (total mass, dust)	2 mg/m ³ TWA (respirable fraction)	5 mg/m ³ TWA (fume); 5 mg/m ³ TWA (dust, respirable mass); 10 mg/m ³ TWA (total mass, dust)
Ethylene glycol (107-21-1)	Ceilings	100 mg/m ³ Ceiling (aerosol only)	100 mg/m ³ Ceiling (aerosol)	50 ppm Ceiling (vapour); 127 mg/m ³ Ceiling (vapour)	100 mg/m ³ Ceiling (aerosol only)	50 ppm Ceiling (vapour); 127 mg/m ³ Ceiling (vapour)
	STELs	Not established	Not established	20 mg/m ³ STEL (particulate)	Not established	20 mg/m ³ STEL (particulate)
	TWAs	Not established	Not established	10 ppm TWA (particulate)	Not established	10 mg/m ³ TWA (particulate)
Titanium dioxide (13463-67-7)	TWAs	10 mg/m ³ TWA	10 mg/m ³ TWA	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)	10 mg/m ³ TWA	5 mg/m ³ TWA (respirable mass); 10 mg/m ³ TWA (total mass)
Aluminum hydroxide (Al(OH) ₃)	TWAs	1 mg/m ³ TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	Not established	Not established	1 mg/m ³ TWA (respirable fraction) <i>as Aluminum insoluble compounds</i>	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China
Carbon Black (1333-86-4)	STELs	Not established	Not established	Not established	7 mg/m ³ STEL	8 mg/m ³ STEL (total dust)
	TWAs	3 mg/m ³ TWA (inhalable)	3.5 mg/m ³ TWAEV	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA	4 mg/m ³ TWA (total dust)
Zinc oxide (1314-13-2)	STELs	10 mg/m ³ STEL (respirable)	10 mg/m ³ STEV (fume)	Not established	10 mg/m ³ STEL (fume); 20 mg/m ³ STEL (dust)	5 mg/m ³ STEL
	TWAs	2 mg/m ³ TWA (respirable)	10 mg/m ³ TWAEV (containing no Asbestos and <1% Crystalline silica, total dust); 5 mg/m ³ TWAEV (fume)	2 mg/m ³ TWA (dust and fume, respirable fraction)	5 mg/m ³ TWA (fume); 30 mppcf TWA (dust); 10 mg/m ³ TWA (dust)	3 mg/m ³ TWA

Ethylene glycol (107-21-1)	STELs	Not established	Not established	Not established	10 ppm STEL (particulate); 20 mg/m ³ STEL (particulate); 125 ppm STEL (vapour); 325 mg/m ³ STEL (vapour)	40 mg/m ³ STEL
	TWAs	Not established	Not established	Not established	10 mg/m ³ TWA (particulate); 100 ppm TWA (vapour); 250 mg/m ³ TWA (vapour)	20 mg/m ³ TWA
	Ceilings	100 mg/m ³ Ceiling (aerosol only)	50 ppm Ceiling (mist and vapour); 127 mg/m ³ Ceiling (mist and vapour)	Not established	Not established	Not established
Titanium dioxide (13463-67-7)	STELs	Not established	Not established	Not established	20 mg/m ³ STEL (as Ti)	16 mg/m ³ STEL (total dust)
	TWAs	10 mg/m ³ TWA	10 mg/m ³ TWAEV (containing no Asbestos and <1% Crystalline silica, total dust)	10 mg/m ³ TWA	30 mppcf TWA (as Ti); 10 mg/m ³ TWA (as Ti)	8 mg/m ³ TWA (total dust)
Aluminum hydroxide (Al(OH) 3)	TWAs	1 mg/m ³ TWA (respirable) <i>as Aluminum insoluble compounds</i>	Not established	Not established	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	Cyprus	Denmark	Germany DFG	Germany TRGS	NIOSH
Carbon Black (1333-86-4)	TWAs	Not established	3.5 mg/m ³ TWA	Not established	Not established	3.5 mg/m ³ TWA; 0.1 mg/m ³ TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)
Zinc oxide (1314-13-2)	TWAs	Not established	4 mg/m ³ TWA (including vapour, as Zn)	Not established	Not established	5 mg/m ³ TWA (dust and fume)
	Ceilings	Not established	Not established	1 mg/m ³ Peak (respirable fraction, fume)	Not established	15 mg/m ³ Ceiling (dust)
	STELs	Not established	Not established	Not established	Not established	10 mg/m ³ STEL (fume)
	MAKs	Not established	Not established	1 mg/m ³ TWA MAK (fume, respirable fraction)	Not established	Not established
	TWAs	20 ppm TWA; 52 mg/m ³ TWA	10 ppm TWA; 26 mg/m ³ TWA; 10 mg/m ³ TWA (vapor)	Not established	10 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 26 mg/m ³ TWA AGW (The risk of damage to the	Not established

Ethylene glycol (107-21-1)					embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2)	
	STELs	40 ppm STEL; 104 mg/m3 STEL	Not established	Not established	Not established	Not established
	Ceilings	Not established	Not established	20 ppm Peak; 52 mg/m3 Peak	Not established	Not established
	MAKs	Not established	Not established	10 ppm TWA MAK; 26 mg/m3 TWA MAK	Not established	Not established
Titanium dioxide (13463-67-7)	TWAs	Not established	6 mg/m3 TWA (as Ti)	Not established	Not established	Not established
Aluminum hydroxide (Al(OH) ₃) (21645-51-2)	MAKs	Not established	Not established	4 mg/m3 TWA MAK (dust, inhalable fraction); 1.5 mg/m3 TWA MAK (dust, respirable fraction)	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	OSHA
Carbon Black (1333-86-4)	TWAs	3.5 mg/m3 TWA
Zinc oxide (1314-13-2)	TWAs	5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Titanium dioxide (13463-67-7)	TWAs	15 mg/m3 TWA (total dust)

Exposure Control Notations

Cyprus

- Ethylene glycol (107-21-1): **Skin:** (Skin-potential for cutaneous absorption)

ACGIH

- Aluminum hydroxide (Al(OH)₃) as Aluminum insoluble compounds: **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Carbon Black (1333-86-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
- Ethylene glycol (107-21-1): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
- Titanium dioxide (13463-67-7): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Germany TRGS

- Ethylene glycol (107-21-1): **Skin:** (skin notation)

Germany DFG

- Aluminum hydroxide (Al(OH)₃) (21645-51-2): **Pregnancy:** (classification not yet possible (respirable, inhalable, dust))
- Carbon Black (1333-86-4): **Carcinogens:** (Category 3B (could be carcinogenic for man, inhalable fraction))
- Ethylene glycol (107-21-1): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
- Titanium dioxide (13463-67-7): **Carcinogens:** (Category 3A (could be carcinogenic for man, inhalable fraction with the exception of ultra small particles))

Exposure Limits Supplemental

ACGIH

- Aluminum hydroxide (Al(OH)₃) as Aluminum insoluble compounds: **TLV Basis - Critical Effects:** (pneumoconiosis; lower respiratory tract irritation; neurotoxicity)
- Carbon Black (1333-86-4): **TLV Basis - Critical Effects:** (bronchitis)
- Ethylene glycol (107-21-1): **TLV Basis - Critical Effects:** (eye and upper respiratory tract irritation)
- Titanium dioxide (13463-67-7): **TLV Basis - Critical Effects:** (lower respiratory tract irritation) | **Notice of Intended Changes (TLVs):** (1 mg/m3 TWA (respirable fraction); A3 - confirmed animal carcinogen with unknown relevance to humans; TLV basis: lower respiratory tract irritation, pneumoconiosis)
- Zinc oxide (1314-13-2): **TLV Basis - Critical Effects:** (metal fume fever)

8.2 Exposure controls

Engineering Measures/Controls

- This material is designed to be used outdoors, in roofing applications. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

Skin/Body

- Wear appropriate gloves.

Environmental Exposure Controls

- In case of spills, keep product clear of sewers, waterways or land areas. Dispose of waste product in accordance with national and local laws and regulations.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Creamy, gray liquid with a paint-like odor.
Color	Gray	Odor	Paint-like
Odor Threshold	Data lacking		
General Properties			
Boiling Point	212 °F(100 °C)	Melting Point/Freezing Point	Not relevant
Decomposition Temperature	Data lacking	pH	8 to 9
Specific Gravity/Relative Density	= 1.46 Water=1	Water Solubility	Dispersible
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	Data lacking	Volatiles (Vol.)	44.4 %
Flammability			
Flash Point	> 212 °F(> 100 °C)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

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

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Extreme temperatures.

10.5 Incompatible materials

- Strong acids. Strong oxidizing substances.

10.6 Hazardous decomposition products

- Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, zinc fumes and smoke may be produced.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

		Components
Aluminum hydroxide (Al(OH) ₃) (20% TO 40%)	21645-51-2	Multi-dose Toxicity: Ingestion/Oral-Woman TDLo • 73912.5 mg/kg 26 Week(s)-Intermittent; <i>Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Musculoskeletal:Osteoporosis; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:P;</i> Reproductive: Ingestion/Oral-Woman TDLo • 84 g/kg (1-40W preg); <i>Reproductive Effects:Effects on Newborn:Physical</i>
Carbon Black (0.1% TO 1%)	1333-86-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >15400 mg/kg; <i>Behavioral:Somnolence (general depressed activity); Skin-Rabbit LD50 • >3 g/kg;</i> Mutagen: DNA adduct • Inhalation-Mouse • 6200 µg/m ³ 16 Hour(s) 12 Week(s)-Intermittent; DNA damage • Inhalation-Rat • 50 µg/L 13 Week(s)-Intermittent; DNA damage • Inhalation-Rat • 50 g/L 13 Week(s); Tumorigen / Carcinogen: Inhalation-Rat TCLo • 11600 µg/m ³ 18 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</i>
Ethylene glycol (1% TO 5%)	107-21-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 470 mg/kg; Ingestion/Oral-Man TDLo • 24 g/kg; <i>Brain and Coverings:Recordings from specific areas of CNS; Sense Organs and Special Senses:Eye:Mydriasis (pupillary dilation); Lungs, Thorax, or Respiration:Other changes;</i> Ingestion/Oral-Man TDLo • 15 g/kg; <i>Peripheral Nerve and Sensation:Sensory change involving peripheral nerve; Gastrointestinal:Ulceration or bleeding from small intestine; Kidney, Ureter, and Bladder:Renal function tests depressed;</i> Ingestion/Oral-Man TDLo • 1195 mg/kg; <i>Peripheral Nerve and Sensation:Sensory change involving peripheral nerve; Kidney, Ureter, and Bladder:Renal function tests depressed;</i> Ingestion/Oral-Rat TDLo • 120 mg/kg; <i>Blood:Changes in bone marrow not included above;</i> Inhalation-Human TCLo • 22 mg/m ³ ; <i>Kidney, Ureter, and Bladder:Proteinuria;</i> Inhalation-Rat TCLo • 0.004 g/m ³ 2 Hour(s); <i>Behavioral:Muscle contraction or spasticity; Lungs, Thorax, or Respiration:Respiratory stimulation; Gastrointestinal:Hypermotility, diarrhea;</i> Skin-Rabbit LD50 • 9530 mg/kg; Irritation: Eye-Rabbit • 100 mg 1 Hour(s) • Mild irritation; Skin-Rabbit • 555 mg-Open • Mild irritation; Multi-dose Toxicity: Inhalation-Guinea Pig TCLo • 0.003 g/m ³ 45 Day(s)-Intermittent; <i>Behavioral:Excitement; Liver:Liver function tests impaired;</i> Inhalation-Rat TCLo • 1 mg/m ³ 32 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Other changes; Liver:Liver function tests impaired; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis);</i> Inhalation-Rat TCLo • 0.003 g/m ³ 228 Day(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes; Vascular:Structural changes in vessels; Lungs, Thorax, or Respiration:Emphysema;</i> Inhalation-Rat TCLo • 0.02 g/m ³ 153 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Emphysema; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis); Blood:Changes in spleen;</i> Mutagen: Cytogenetic analysis • Ingestion/Oral-Rat • 1200 mg/kg; Reproductive: Ingestion/Oral-Mouse TDLo • 850 mg/kg (multigenerations); <i>Reproductive Effects:Specific Developmental Abnormalities:Urogenital system;</i> Inhalation-Mouse TCLo • 1000 mg/m ³ 6 Hour(s)(6-15D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity</i>

		(except death, e.g., stunted fetus); <i>Reproductive Effects:Effects on Newborn:Sex ratio</i> ; Inhalation-Mouse TCl ₀ • 2100 mg/m ³ 6 Hour(s)(6-15D preg); <i>Reproductive Effects:Maternal Effects:Other effects</i> ; <i>Reproductive Effects:Effects on Fertility:Pre-implantation mortality</i> ; <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality</i> ; Inhalation-Rat TCl ₀ • 2500 mg/m ³ 6 Hour(s)(6-15D preg); <i>Reproductive Effects:Maternal Effects:Other effects</i> ; <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i> ; <i>Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities</i>
Titanium dioxide (5% TO 10%)	13463-67-7	Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; Multi-dose Toxicity: Inhalation-Rat TCl ₀ • 250 mg/m ³ 6 Hour(s) 4 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Chronic pulmonary edema</i> ; <i>Lungs, Thorax, or Respiration:Other changes</i> ; Inhalation-Rat TCl ₀ • 10 mg/m ³ 6 Hour(s) 13 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Fibrosis (interstitial)</i> ; <i>Lungs, Thorax, or Respiration:Other changes</i> ; <i>Biochemical:Metabolism (intermediary):Effect on inflammation or mediation of inflammation</i> ; Mutagen: Micronucleus test • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent; DNA damage • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent; Cytogenetic analysis • Ingestion/Oral-Mouse • 280 mg/kg 7 Day(s)-Intermittent; Tumorigen / Carcinogen: Inhalation-Rat • 10 mg/m ³ 18 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria</i> ; <i>Lungs, Thorax, or Respiration:Tumors</i> ; Inhalation-Rat TCl ₀ • 250 mg/m ³ 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria</i> ; <i>Lungs, Thorax, or Respiration:Tumors</i>
Zinc oxide (1% TO 5%)	1314-13-2	Acute Toxicity: Inhalation-Mouse LC50 • 2500 mg/m ³ ; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Reproductive: Ingestion/Oral-Rat TDLo • 6846 mg/kg (1-22D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Homeostasis</i> ; <i>Reproductive Effects:Effects on Newborn:Stillbirth</i> ; <i>Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain)</i>

GHS Properties	Classification
Acute toxicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2
Skin sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Aspiration Hazard	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Carcinogenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Germ Cell Mutagenicity	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
STOT-SE	EU/CLP • Data lacking OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1
STOT-RE	EU/CLP • Data lacking OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

- Chronic (Delayed)**
- No data available
- Skin**
- Acute (Immediate)**
- Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)**
- No data available
- Eye**
- Acute (Immediate)**
- Causes serious eye irritation.
- Chronic (Delayed)**
- No data available
- Ingestion**
- Acute (Immediate)**
- May affect the kidney. Symptoms may include but are not limited to fatigue, confusion, nausea, vomiting, shortness of breath, seizures, or a dramatic decrease in urine output and in some cases blood in the urine.
- Chronic (Delayed)**
- Repeated and prolonged exposure may affect the kidneys. Symptoms may include but are not limited to weight loss, nausea, swelling of the arms and legs, vomiting, fatigue, headaches, decreased urine or urine that is mostly water, decreased mental sharpness, and muscle cramps and shakes.
- Carcinogenic Effects**
- Although this material contains titanium dioxide, which may be a carcinogen, due to the physical form of this material, it is unlikely that exposure to titanium dioxide will occur while using this material under normal conditions. This product contains carbon black (encapsulated)(1333-86-4). According to IARC "No significant exposure to carbon black is thought to occur during the use of products in which carbon black is bound to other materials, such as rubber, printing ink or paint."

Carcinogenic Effects		
	CAS	IARC
Carbon Black	1333-86-4	Group 2B-Possible Carcinogen
Titanium dioxide	13463-67-7	Group 2B-Possible Carcinogen

Key to abbreviations

LC = Lethal Concentration
 LD = Lethal Dose
 TC = Toxic Concentration
 TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

	CAS	
AcryliTop™ PC-100 Coating Grey	NDA	<p>Aquatic Toxicity-Fish: 96 Hour(s) LC50 1000000 µg/L Comments: Titanium dioxide 48 Hour(s) LC50 10000 µg/L Comments: Titanium dioxide 14 Day(s) NOEC 431 µg/L Comments: Titanium dioxide</p> <p>Aquatic Toxicity-Crustacea: 48 Hour(s) EC50 <i>Daphnia magna</i> 1 mg/L Comments: Zinc oxide 48 Hour(s) NOEC <i>Daphnia magna</i> 0.4 mg/L Comments: Zinc oxide 48 Hour(s) EC50 Water Flea 100000 µg/L Comments: Titanium dioxide</p> <p>Aquatic Toxicity-Algae and Other Aquatic Plant(s): 72 Hour(s) EC50 <i>Green Algae</i> 5830 µg/L Comments: Titanium dioxide</p>

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

- Toxic to aquatic life with long lasting effects.

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
ADN	NDA	Not Regulated	NDA	NDA	NDA
ADR/RID	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 and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications

- Acute, Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Aluminum hydroxide (Al(OH) ₃)	21645-51-2	No	No	No
Carbon Black	1333-86-4	Yes	Yes	Yes
Ethylene glycol	107-21-1	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	Yes	Yes
Zinc oxide	1314-13-2	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	China	EU EINECS	EU ELNICS
Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Yes	No	Yes	Yes	No
Carbon Black	1333-86-4	Yes	No	Yes	Yes	Yes
Ethylene glycol	107-21-1	Yes	No	Yes	Yes	No
Titanium dioxide	13463-67-7	Yes	No	Yes	Yes	No
Zinc oxide	1314-13-2	Yes	No	Yes	Yes	No
Inventory (Con't.)						
Component	CAS	Japan ENCS	Korea KECL	TSCA		
Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Yes	Yes	Yes		
Carbon Black	1333-86-4	Yes	Yes	Yes		
Ethylene glycol	107-21-1	Yes	Yes	Yes		
Titanium dioxide	13463-67-7	Yes	Yes	Yes		
Zinc oxide	1314-13-2	Yes	Yes	Yes		

Australia

Labor

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Australia - High Volume Industrial Chemicals List

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	
• Carbon Black	1333-86-4	
• Titanium dioxide	13463-67-7	
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	

Australia - List of Designated Hazardous Substances - Classification

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Self classification required
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Self classification required (dust and fume); N R50, R53
• Ethylene glycol	107-21-1	Xn R22

Environment

Australia - National Pollutant Inventory (NPI) Substance List

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	10 tonne/yr Threshold category 1

Australia - Ozone Protection Act - Scheduled Substances

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Australia - Priority Existing Chemical Program

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Belgium**Labor****Belgium - Substances and Preparations - Carcinogens and Mutagens**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Bulgaria**Environment****Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 24 Hour**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - 30 Minute

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Bulgaria - Air Quality - Maximum Admissible Hazardous Contaminant Levels - Annual

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Canada**Labor****Canada - WHMIS - Classifications of Substances**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Uncontrolled product according to WHMIS classification criteria D2A (In certain cases, this classification does not apply.)
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• Carbon Black	1333-86-4	For more information, consult the section Substance Specific Issues - Carbon Black, non-respirable on Health Canada's WHMIS Division website.) 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
• Zinc oxide	1314-13-2	D1B, D2A
• Ethylene glycol	107-21-1	
Canada - WHMIS - Ingredient Disclosure List		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	1 %
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	1 %
• Ethylene glycol	107-21-1	1 %

Environment**Canada - CEPA - Priority Substances List**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Priority Substance List 2 (substance not considered toxic)

China**Other****China - Annex I & II - Controlled Chemicals Lists**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Denmark**Environment****Denmark - List of Undesirable Substances - Product Groups/Function**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Europe

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	N; R50-53
• Ethylene glycol	107-21-1	Xn; R22

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	N R:50/53 S:60-61
• Ethylene glycol	107-21-1	Xn R:22 S:(2)

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	S:60-61
• Ethylene glycol	107-21-1	S:(2)

Germany**Labor****Germany - Immission Control - Qualifying Quantities for Major Accident Prevention**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed

• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TRGS 511 - Specific Ammonium Nitrate Regulations

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Environment**Germany - TA Luft - Types and Classes**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	ID Number 1742, not considered hazardous to water
• Titanium dioxide	13463-67-7	ID Number 1345, not considered hazardous to water
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	ID Number 105, hazard class 1 - low hazard to waters (footnote 11)
Germany - Water Classification (VwVwS) - Annex 3		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	ID Number 5220, not considered hazardous to water
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	ID Number 2187, hazard class 2 - hazard to waters
• Ethylene glycol	107-21-1	Not Listed

United States

Labor		
U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed
U.S. - OSHA - Specifically Regulated Chemicals		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

Environment		
U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed

• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	5000 lb final RQ; 2270 kg final RQ
U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed
U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed
U.S. - CERCLA/SARA - Section 313 - Emission Reporting		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	1.0 % de minimis concentration
U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing		
• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

United States - California

Environment

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
• Titanium dioxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	(fume)
• Ethylene glycol	107-21-1	

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

• Aluminum hydroxide (Al(OH) ₃)	21645-51-2	Not Listed
• Carbon Black	1333-86-4	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Zinc oxide	1314-13-2	Not Listed
• Ethylene glycol	107-21-1	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)

- H302 - Harmful if swallowed
- H341 - Suspected of causing genetic defects.
- H351 - Suspected of causing cancer.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- R22 - Harmful if swallowed.
- R40 - Limited evidence of a carcinogenic effect.
- R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R50 - Very toxic to aquatic organisms.
- R68 - Possible risk of irreversible effects.

Revision Date

- 26/January/2018

Preparation Date

- 06/November/2014

Other Information

- Changes to this revision: Updated mailing address.

Disclaimer/Statement of Liability

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Key to abbreviations

NDA = No data available