SAFETY DATA SHEET
FORTICOAT WALL

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Forticoat Wall

Recommended use of the chemical and restrictions on use

Application Coating

Uses advised against No specific uses advised against are identified

Details of the supplier of the safety data sheet

Manufacturer FortiSystems
16601 Central Green Blvd.
Suite 100
Houston, TX 77032 USA
T: 833.840.2777

Emergency telephone number

Emergency telephone 832.922.2926

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Carc. 1A – H350

Label elements

Pictogram

Signal word Danger

Hazard Statements H350 May cause cancer.

Precautionary statements P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308+P313 If exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Contains Titanium Dioxide, Quartz (SiO2, Biocide – withheld as TRADE SECRET

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

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Limestone CAS number: 1317-65-3	10-<50%
Titanium dioxide CAS number: 13463-67-7	1 - <15%
Zinc oxide CAS number: 1314-13-2	0 - <0.5%
Aluminum hydroxide CAS number: 21645-51-2	0 - <15%
Quartz (Si02) CAS number: 14808-60-7	0.25 - <0.5%
Ammonia CAS number: 1336-21-6	<1%
Biocide - withheld as TRADE SECRET CAS number: Proprietary	<1%
Kaolin CAS number: 1332-58-7	<1%

Composition comments The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200

The product identifiers are withheld as a trade secret in accordance with 29 CFR 1910.1200

4. First-aid measures

Description of first aid measures

General information Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

Ingestion Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.

Skin contact Rinse with water.

Eye contact Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

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Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

Ingestion Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

Skin contact Redness. Irritating to skin. Prolonged or repeated exposure may cause the following adverse effects: May cause cancer.

Eye contact May cause temporary eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media No data available.

Special hazards arising from the substance or mixture

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Unusual Fire and Explosion Hazards In a fire or if heated, a pressure increase will occur and the container may burst.

Advice for firefighters

Protective actions during firefighting No data available.

Special protective equipment for firefighters Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

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Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Approach the spillage from upwind.

Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container.

Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labeled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water.

Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. May cause cancer. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class

Miscellaneous hazardous material storage.

Shelf-Life

12 months

Storage temperature

Minimum storage temperature: 1°C/33.8°F
Maximum storage temperature: 49°C/120.2°F

Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

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Comments The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Limestone

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Titanium dioxide

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m³ A4

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Zinc oxide

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ fume

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m respirable fraction

Short-term exposure limit (15-minute): ACGIH 10 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Aluminum hydroxide

Long-term exposure limit (8-hour TWA): ACGIH 1 mg/m³

A4

Quartz (SiO2)

Long-term exposure limit (8-hour TWA): ACGIH 0.025 mg/m³ respirable fraction

A2

Ammonia

Long-term exposure limit (8-hour TWA): ACGIH 25 ppm 17 mg/m³ Short-term exposure limit (15-minute): ACGIH 35 ppm 24 mg/m³
Long-term exposure limit (8-hour TWA): OSHA 50 ppm 35 mg/m³

Biocide - withheld as TRADE SECRET

Long-term exposure limit (8-hour TWA): ACGIH 10 mg/m³ A4

Kaolin

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ respirable fraction

A4

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

A4 = Not Classifiable as a Human Carcinogen.

A2 = Suspected Human Carcinogen.

Titanium Dioxide (CAS: 13463-67-7)

Immediate danger to life and health	5000 mg/m³

Zinc oxide (CAS: 1314-13-2)

Immediate danger to life and health	500 mg/m³

Silicon dioxide (CAS: 7361-86-9)

Immediate danger to life and health	3000 mg/m³

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Quartz (SiO2) (CAS: 14808-60-7)

Immediate danger to life and health	25 mg/m³ 50 mg/m³

Ammonia (CAS: 1336-21-6)

Immediate danger to life and health	300 ppm

Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. If inhalation hazards exist, a full-face respirator may be required instead.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.
Environmental exposure controls	Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Various colors.

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Odor	Mild. Amine.
Odor threshold	Not available.
pH	Not available.
Melting point	0°C (as water)
Initial boiling point and range	100°C (boiling point of water)
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	17 mm Hg @ 20°C/68°F
Vapor density	Not available.
Relative density	Not available.
Specific Gravity	1.2 – 1.5
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.
Volatile organic compound	<50g/liter

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity – oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

Skin corrosion/irritation

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Skin corrosion/irritation	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	Based on available data the classification criteria are not met.

Respiratory sensitization

Respiratory sensitization	Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization	Based on available data the classification criteria are not met. The product contains a small amount of sensitizing substance. May cause skin sensitization or allergic reactions in sensitive individuals.

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	May cause cancer.
IARC carcinogenicity	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
NTP carcinogenicity	Contains: Silica, Crystalline (Respirable Size) Known human carcinogen.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met
General information	May cause cancer after repeated exposure. Risk of cancer depends on duration and level of exposure. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Discoloration of the skin. Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause temporary eye irritation.
Route of entry	Ingestion, Inhalation, skin and/or eye contact.
Target organs	No specific target organs known.

12. Ecological information

Toxicity	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Persistence and degradability	The degradability of the product is not known.

Bio-accumulative potential

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Bio-accumulative potential	No data available on bioaccumulation.
Partition coefficient	Not available.

Mobility in soil

Mobility	No data available.

Other adverse effects

Other adverse effects	None known.

13. Disposal considerations

Waste treatment methods

General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	Do not empty into drains. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number
Not applicable.

UN proper shipping name
Not applicable.

Transport hazard class(es)
No transport warning sign required.

Packing group
Not applicable.

Environmental hazards
Environmentally Hazardous Substance

No.

Special precautions for user
Not applicable.

DOT TIH Zone	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

Regulatory Status	Classified in accordance with Appendix A, Appendix B and Appendix F of the OSHA Hazard Communication Standard 29 CFR § 1910.1200

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Regulatory References OSHA Hazard Communication Standard 29 CFR §1910.1200

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed or exempt:

Ammonia
Final CERCLA RQ: 1000(454) pounds (Kilograms)

methyl benzimidazol-2-yl carbamate
Final CERCLA RQ: 10(4.54) pounds (Kilograms)

Biocide - withheld as TRADE SECRET
Final CERCLA RQ: 100(45.4) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
The following ingredients are listed or exempt:

Ammonia
1.0%

Zinc oxide
1.0%

Biocide - withheld as TRADE SECRET
1.0%

Biocide - withheld as TRADE SECRET
1.0%

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
The following ingredients are listed or exempt:

Benzophenone
Known to the State of California to cause cancer.

Silicon dioxide

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Known to the State of California to cause cancer.

Titanium Dioxide
Known to the State of California to cause cancer.

Biocide - withheld as TRADE SECRET
Known to the State of California to cause cancer.

California Air Toxics "Hot Spots" (A-I)
The following ingredients are listed or exempt:

Silicon dioxide

Zinc oxide

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
The following ingredients are listed or exempt:

Ammonia

Silicon dioxide

Biocide - withheld as TRADE SECRET

Massachusetts "Right To Know" List
The following ingredients are listed or exempt:

Ammonia

Limestone

Quartz (Si02)

Silicon dioxide

Titanium Dioxide

Zinc oxide

Biocide - withheld as TRADE SECRET

Kaolin

Rhode Island "Right To Know" List
The following ingredients are listed or exempt:

Benzophenone

Limestone

Quartz (Si02)

Silicon dioxide

Titanium Dioxide

Zinc oxide

Propane-1,2-diol

Biocide - withheld as TRADE SECRET

Kaolin

Minnesota "Right To Know" List
The following ingredients are listed or exempt:

Benzophenone

Limestone

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Quartz (Si02)

Silicon dioxide

Titanium Dioxide

Zinc oxide

Propane-1,2-diol

Biocide - withheld as TRADE SECRET

Kaolin

New Jersey "Right To Know" List
The following ingredients are listed or exempt:

Ammonia

Limestone

Quartz (Si02)

Titanium Dioxide

Zinc oxide

Propane-1,2-diol

Biocide - withheld as TRADE SECRET

methyl benzimidazol-2-yl carbamate

Biocide - withheld as TRADE SECRET

Kaolin

Pennsylvania "Right To Know" List
The following ingredients are listed or exempt:

Ammonia

Limestone

Quartz (Si02)

Silicon dioxide

Titanium Dioxide

Zinc oxide

Propane-1,2-diol

Biocide - withheld as TRADE SECRET

Kaolin

Inventories

US – TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

Note:	Based on information provided by our suppliers, this product is considered “DRC Conflict Free” as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7- 40-10; Date: 2012-08-22).

16. Other information

Classification abbreviations and acronyms	Carc. = Carcinogenicity

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Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision date	1/18/2018
Revision	3
Supersedes date	4/3/2017
SDS No.	5533
Hazard statements in full	H350 May cause cancer.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.