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Security Floor Treatment: Product Safety Summary

This Product Safety Summary is intended to provide a general overview of the product. This summary is not intended to provide detailed emergency response, medical, safety, health or treatment information. Reference the product Material Safety Data Sheet (MSDS) for in-depth safety and health information.

Product Overview

Security Floor Treatment (SFT) belongs to a class of products commonly referred to as alkali-peroxides. As the name implies, alkali-peroxides are alkaline compounds that contain or release peroxide compounds.

The primary ingredient in SFT is sodium carbonate peroxyhydrate (commonly referred to as sodium percarbonate) is an addition compound of sodium carbonate and hydrogen peroxide. Sodium percarbonate liberates hydrogen peroxide when dissolved in water. Sodium percarbonate is a white, granular or powdered solid oxidizer that is used primarily as a bleaching agent in cleaning products (e.g. OxiClean™ Versatile Stain Remover[1] and Arm & Hammer Peroxicare® Toothpaste[2]).

SFT also contains sodium carbonate (commonly referred to as soda ash). Sodium carbonate increases the alkalinity of the product and acts as a buffer (resists changes in pH). The vast majority of alkaline powder detergents contain this ingredient. It is a component in powdered household laundry detergents (e.g. Tide Granular Laundry Detergent[3]).

SFT contains surfactants which are used in a variety of cleaning applications and materials that accelerate the release of oxygen from the product.

Exposure to SFT can cause irritation to the skin, eyes, and respiratory tract. Ingestion should be avoided at all concentrations.

Product Description

SFT is packaged either in fiber drums containing 4 mil, translucent plastic liners or open-head 1-gallon high-density polyethylene jugs with white foam-lined caps. Typical physical properties are provided in Table 1.

Table 1: Typical physical properties for Security Floor Treatment

Appearance	White granules
Odor	Mild to none
pH (1% in water, wt/wt)	10
Melting Point	>250°F (>121°C)
Packed Density	7.9#/gal (950g/l)
Foam Characteristics	Low

General Hazard Considerations

The primary hazard attributable to SFT stems from its oxidizing nature. SFT is categorized as a Class 1 Oxidizer according to documentation from the National Fire Protection Association (NFPA) (http://www.nfpa.org/assets/files/pdf/research/oxidizerclassificationproject.pdf).

Class 1 Oxidizers:

- Slightly increase the burning rate of combustible materials.
- Do not cause spontaneous ignition when they come in contact with them.

Class 1 Oxidizers are not generally considered dangerous when wetted or when they come in contact with living tissue.

Product Use

When handling SFT, avoid contact with eyes, skin or clothing. Use proper personal protective equipment (PPE) as defined in the Material Safety Data Sheet or Safety Data Sheet. Typical handling PPE consists of leg coverings (e.g. long pants), shoes that cover the entire foot, safety glasses and gloves. Dust masks may also be worn if the material is handled in a way that makes the dust become airborne.

SFT is intended for undiluted application to floors and other non-metallic surfaces. Use rates for various surfaces are provided in Table 2.

Table 2: Recommended product use rates

Drain treatment	Apply to drain covers and entire perimeter or drain
Floor treatment	Apply 2 to 4 ounces per square yard (68 to 135 grams per square meter)
Entryway treatment	Apply 1/16 to 1/8 inch (1.6 to 3.2 millimeter) thick in entryway or on mat

Properly mark all transportation containers containing this product. Secondary containment tags and self-adhesive labels are available from DeVere Company, Inc. (DeVere).

See product use training materials and product label for more information.

Product Storage

Store in the original, tightly closed container in a secure area out of reach of children and domestic animals and away from sources of heat. Do not store food, beverage or tobacco in the storage area.

Avoid storage in areas where the air temperatures exceed 104°F (40°C) for long periods of time. Do not store product in direct sunlight. Keep product covered and protected especially in areas of high (> 50% R.H.) humidity. Keep product away from heat sources such as motors, heated tanks or heating units.

Exposure Potential

Security Floor Treatment is intended to come in contact with footwear, wheels and other surfaces that come in contact with treated surfaces. Following good industrial hygiene practices will limit exposure to the product's intended use. Leg coverings (e.g. long pants) and shoes that cover the entire foot are sufficient to eliminate any exposure during this intended use of the product.

SFT is not slippery when used as directed. As with any other loose, granular, crystal or powder, extremely thick layers of SFT can cause slip concerns. If a slip-hazard is detected, reduce the amount of product applied to a given area until the slip hazard is eliminated. Alternatively, SFT-coated areas can be misted with water then allowed to dry. Note that when SFT is wetted and allowed to dry, the product forms a sandpaper-like coating on the floor and works well to reduce slip hazards.

People who transfer, transport, apply, clean up and/or dispose of SFT have a higher exposure potential. These individuals should wear leg coverings (e.g. long pants), shoes that cover the entire foot, safety glasses and gloves when handling SFT. Dust masks may also be worn if handling the material in a way that makes the dust become airborne.

Product Disposal

Rinse used product to drain immediately after use in accordance with all applicable regulations. Do not seal drains after rinsing used SFT down the drain since the solution will generate oxygen. After removing SFT from the point of use, do not mix used SFT with other chemicals or waste prior to rinsing down drain.

People involved in disposal of used SFT should wear proper PPE (See guidelines in the Exposure Potential section of this Summary or the Material Safety Data Sheet for details).

Unused product may be returned to the manufacturer or distributor per the appropriate terms and conditions of the original sale.

Environmental Releases

Small spills of SFT should be contained and disposed of as described in the Product Disposal section of this document. Contain larger spills and contact a HAZMAT-trained disposal company or contact the manufacturer for proper procedures.

People involved in spill clean-up should wear proper personal protective equipment (See guidelines in the Exposure Potential section of this document or the Material Safety Data Sheet for details).

Fires

Security Floor Treatment is not flammable or combustible. As previously noted, SFT is an oxidizer.

Fires involving SFT should be extinguished with large amounts of water and containers of SFT involved in a fire should be cooled with water sprays. After a fire, wet or damp containers of SFT may start to release oxygen and heat which can make adjacent fires burn hotter. If an SFT container begins to discolor or vent noticeably, emergency responders should evacuate the area.

Exposure Information

The reactions of people exposed to SFT will depend on the type of exposure. As described in the MSDS and in this document, care should be taken to minimize exposure risks.

In all cases, proper PPE should be used when handling SFT (see guidelines in the Exposure Potential section of this Summary) and first aid should be administered as described on the MSDS should unsafe exposure occur. Although not complete, a typical list of symptoms that can be expected by exposure type can be found in Table 3.

Table 3: Symptoms that can result from exposure to SFT

Dermal Exposure	Typical skin exposure symptoms include dry, cracked skin. Redness and swelling can occur in rare instances.
Ocular Exposure	The granular product can physically scratch eyes. Severe eye irritation and burns and possible blindness can result if the product is not rinsed away promptly.
Respiratory Exposure	Inhalation of this product can cause nose and throat irritation, coughing and sneezing.
Ingestion	Irritation of the mouth and throat along with possible nausea and eventual diarrhea are expected. Burns can form in areas exposed to the product for long periods of time or exposed repeatedly. Consumption of large quantities can be fatal.
Long-term Health Effects	SFT does not contain any carcinogens as defined by the International Agency for Research on Cancer (IARC). In the vast majority of cases, any damage caused by this product will heal in a relatively short amount of time.

Environmental Decomposition and Regulatory Concerns

Greater than 98% by weight of SFT will decompose in the presence of moisture to oxygen, carbon dioxide and water. Given the nature of the decomposition products and the fact that SFT does not contain any toxins, carcinogens or suspect carcinogens, there is no cause for concern regarding the environmental fate of properly used and disposed SFT.

Neither fresh SFT nor fully decomposed SFT contains any of the compounds listed on Guidance for Industry: Action Levels for Poisonous or Deleterious Substances in Human Food and Animal Feed.[4]

Biodegradability Statement

DeVere is not aware of a definition by any regulatory entity of the United States government for the term “Biodegradable”. As the manufacturer, DeVere guarantees greater than 99% of all chemical ingredients used in formulating the compounds noted below will break down rapidly to naturally occurring molecules. Further, the breakdown of over 99% of SFT will result in water, oxygen sodium chloride (table salt) and sodium carbonate (soda ash) which are all naturally occurring.

Disclaimer

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References

[1] http://www.ahprofessional.com/msds/MSDS-1605-OxiClean%20Versatile%20Stain%20Remover.pdf
[2] http://www.setonresourcecenter.com/msdshazcom/htdocs//MSDS/Retail/A/Arm%20and%20Hammer%20Peroxicare%20Toothpaste%20(Variety).pdf
[3] http://www.gjfood.com/pdf/msds/55_800850.pdf
[4] http://www.ccohs.ca/oshanswers/chemicals/oxidizing/oxiziding_hazards.html