



SDS: 0009766  
Date Prepared: 03/19/2016

## SAFETY DATA SHEET

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### 1. IDENTIFICATION

**Product Name:** DAPCO™ 2200 Primerless Firewall Sealant, Part B  
**Product Description:** Mixture of alkyl silicate and silane compound  
**Synonyms:** None  
**Chemical Family:** Silane  
**Molecular Formula:** Mixture  
**Molecular Weight:** Mixture  
**Intended/Recommended Use:** Engineered material sealant

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA  
**For Product and all Non-Emergency Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.**

**EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:**

**Asia Pacific:**

Australia - +61-3-9663-2130 or 1800-033-111 (IXOM)  
China (PRC) - +86 0532 83889090 (NRCC)  
New Guinea - +61-3-9663-2130 or 1800-033-111  
New Zealand - +61-3-9663-2130 or 0800-734-607 (IXOM)  
India, Japan, Korea, Malaysia, Thailand - +65 3158 1074 (Carechem24 Singapore)  
India (Hindi Speaking Only) - +65 3158 1198 or 000800 100 7479 (Carechem24 Singapore)

**Canada:** +1-905-356-8310 (Cytec Welland, Canada plant)

**Europe/Africa/Middle East (Carechem24 UK):**

Europe, Middle East, Africa, Israel - +44 (0) 1235 239 670  
(Arabic speaking countries) - +44 (0) 1235 239 671

**Latin America:**

Brazil - 0800 7077 022 (SUATRANS)  
Chile - +56-2-2-247-3600 (CITUC QUIMICO)  
All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

**USA:** +1-703-527-3887 or 1-800-424-9300 (CHEMTREC #CCN6083)

The ® indicates a Registered Trademark in the United States and the ™ indicates a trademark in the United States. The mark may also be registered, subject of an application for registration, or a trademark in other countries.

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### 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable Liquid Hazard Category 3  
Germ Cell Mutagenicity Hazard Category 2  
Reproductive Toxicant Category 1A  
Specific Target Organ Toxicity - Repeated Exposure Hazard Category 1  
Specific Target Organ Toxicity - Single Exposure Hazard Category 1  
Skin Corrosion / Irritation Hazard Category 1B  
Serious Eye Damage / Eye Irritation Hazard Category 1  
Skin Sensitizer Hazard Category 1B  
Aquatic Environment Acute Hazard Category 2  
Aquatic Environment Chronic Hazard Category 2

**LABEL ELEMENTS**



**Signal Word**

Danger

**Hazard Statements**

Flammable liquid and vapor  
Suspected of causing genetic defects  
May damage fertility or the unborn child  
Causes damage to organs through prolonged or repeated exposure  
Causes damage to organs  
Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
Toxic to aquatic life with long lasting effects

**Precautionary Statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/Bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Obtain special instructions before use.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash face, hands and any exposed skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Avoid release to the environment.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
In case of fire: Use CO2, dry chemical, or foam for extinction.  
Specific treatment (see supplemental first aid instructions on this label).  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Immediately call a POISON CENTER or doctor/physician.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container in accordance with local and national regulations.

**Hazards Not Otherwise Classified (HNOC), Other Hazards**

Not applicable

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance, Mixture or Article?** Mixture

**HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification	Carcinogen
Tetrapropyl orthosilicate 682-01-9	30 - 60	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)	-
gamma-Aminopropyltriethoxy silane 919-30-2	30 - 60	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1B (H317)	-
Dibutyltin dilaurate 77-58-7	< 5	Muta. 2 (H341) Repr. 1B (H360FD) STOT Rep. 1 (H372) STOT Single 1 (H370) Skin Corr. 1C (H314) Eye Dam. 1 (H318) Skin Sens. 1B (H317) Aquatic Acute 1 (H410) Aquatic Chronic 1 (H410)	-
Titanium Dioxide 13463-67-7	< 1	Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)	IARC 2B
Ethanol 64-17-5	<= 1	Flam. Liq. 2 (H225) Repr. 1A (H360) Skin Irrit. 3 (H316) Eye Irrit. 2A (H319)	IARC 1 NTP(as Alcoholic beverages) ACGIH A3

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

## 4. FIRST AID MEASURES

### DESCRIPTION OF FIRST AID MEASURES

**Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

**Skin Contact:**

Remove contaminated clothing and shoes without delay. Wear impermeable gloves. Wash immediately with plenty of water. Pay particular attention to skin crevices, nail folds, etc. Do not reuse contaminated clothing without laundering. Do not reuse contaminated leatherware. Obtain medical attention.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media:

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

### Extinguishing Media to Avoid:

full water jet

### Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

### Special Hazards:

Keep containers cool by spraying with water if exposed to fire. Use water to keep containers cool but avoid letting it contact this product.

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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions:

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

### Methods For Cleaning Up:

Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

### References to other sections:

See Sections 8 and 13 for additional information.

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## 7. HANDLING AND STORAGE

### HANDLING

**Precautions:** Avoid release to the environment. Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash hands thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe vapors or spray mist.

**Special Handling Statements:** This material will corrode steel or aluminum at a rate greater than 6.25 mm (0.25 inches/year) @ 55 °C (130 °F). It is thus considered to be a corrosive material for transportation purposes.

### STORAGE

Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed.

In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, 60 °C < Flashpoint < 93 °C. Class IIIb Combustible Liquids, Flashpoint > 93 °C.

**Storage Temperature:** Store at <27 °C 80 °F

**Reason:** Quality.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure when spraying or curing at elevated temperatures.

### Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. A full facepiece respirator also provides eye and face protection. Cutting, grinding or sanding of parts fabricated after curing may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to components listed above for potential hazardous components in the dust.

### Eye Protection:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

### Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. Barrier creams may be used in conjunction with the gloves to provide additional skin protection. Wear impermeable gloves and suitable protective clothing.

### Hand Protection:

Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

### Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

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### Exposure Limit(s)

The below 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.

#### 13463-67-7 Titanium Dioxide

OSHA (PEL):	15 mg/m <sup>3</sup> total dust (TWA)
ACGIH (TLV):	10 mg/m <sup>3</sup> (TWA)
Other Value:	Not established

#### 64-17-5 Ethanol

OSHA (PEL):	1000 ppm (TWA)
	1900 mg/m <sup>3</sup> (TWA)
ACGIH (TLV):	1000 ppm (STEL)
Other Value:	Not established

#### 77-58-7 Dibutyltin dilaurate

OSHA (PEL):	0.1 mg/m <sup>3</sup> (TWA)(as Tin organic compounds)
ACGIH (TLV):	0.2 mg/m <sup>3</sup> Sn (STEL)(as Tin organic compounds)
	(skin)(as Tin organic compounds)
	0.1 mg/m <sup>3</sup> Sn (TWA)(as Tin organic compounds)
Other Value:	Not established

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	white
<b>Appearance:</b>	liquid
<b>Odor:</b>	ammonia-like
<b>Boiling Point:</b>	Not available
<b>Melting Point:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable
<b>Specific Gravity/Density:</b>	0.928
<b>Vapor Density:</b>	Not applicable
<b>Percent Volatile (% by wt.):</b>	62.7
<b>pH:</b>	Not applicable
<b>Saturation In Air (% By Vol.):</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility In Water:</b>	Reacts with water
<b>Volatile Organic Content:</b>	676 gm/L
<b>Flash Point:</b>	60 °C 140 °F      Setaflash Closed Cup
<b>Flammability (solid, gas):</b>	Not available
<b>Flammable Limits (% By Vol):</b>	Not applicable
<b>Autoignition (Self) Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Partition coefficient (n-octanol/water):</b>	Not applicable
<b>Odor Threshold:</b>	Not available
<b>Viscosity (Kinematic):</b>	Not applicable

### DUST HAZARD INFORMATION

<b>Particle Size (microns):</b>	Not applicable
<b>Kst (bar-m/sec):</b>	Not applicable
<b>Maximum Explosion Pressure (Pmax):</b>	Not applicable
<b>Dust Class:</b>	Not applicable
<b>Minimum Ignition Energy (MIE) (mJ):</b>	Not applicable
<b>Minimum Ignition Temperature (MIT) (°C):</b>	Not applicable
<b>Minimum Explosive Concentration (MEC) (g/m<sup>3</sup>):</b>	Not applicable
<b>Limiting Oxygen Concentration (LOC) (%):</b>	Not applicable

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## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Conditions To Avoid:</b>	None known
<b>Polymerization:</b>	Will not occur
<b>Conditions To Avoid:</b>	None known
<b>Materials To Avoid:</b>	This material contains an organo silane compound which reacts vigorously with water releasing heat. The addition of small amounts of water (in the range of 2-15%) can produce an exothermic reaction which generates alcohol, to the extent that the resulting solution can reach a temperature which exceeds the flash point of the new solution. If a water solution is desired, add the product to water, and not vice versa.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide Carbon monoxide (CO) Oxides of nitrogen silicon dioxide





Ethanol has acute oral (rat) and dermal (rabbit) LD50 values of 7060 mg/kg and 20,000 mg/kg, respectively. The 10-hour inhalation LC50 for ethanol in rats is 20,000 ppm (59.4 mg/L/4hr). The literature reports a lower 4-hour acute inhalation (rat) LC50 value of 31,000 mg/m<sup>3</sup> (31 mg/l). Inhalation overexposure may cause respiratory tract irritation. Ethanol is a potent teratogen associated with abnormal fetal formation, growth retardation, neurological damage, and behavioral alterations in children with fetal alcohol syndrome. Chronic ingestion of ethanol may cause damage to the liver, heart and gastrointestinal tract. In a dominant lethal assay, male mice treated with ethanol over a three day period showed significant decrease in average litter size along with increased incidence of dead implants. Ethanol is reported to have shown positive results in in vivo and in vitro screening tests for mutagenicity. Direct contact with ethanol may cause moderate eye irritation and mild skin irritation. Ethanol may cause central nervous system depression that causes stupor, coma and eventually death if ingested in excessive quantities. The literature shows that due to synergistic and potentiating effects, the toxicity of ethanol may be enhanced by exposure to halogenated hydrocarbons and Manganese.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

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## 12. ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

**Overall Environmental Toxicity:** Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

The ecological assessment for this material is based on an evaluation of its components.

### RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Tetrapropyl orthosilicate 682-01-9	Not available	Not available	Not available
gamma-Aminopropyltriethoxy silane 919-30-2	Not available	Not available	Not available
Dibutyltin dilaurate 77-58-7	Not available	Not available	Not available
Titanium Dioxide 13463-67-7	Not available	Not available	Not available



Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Ethanol 64-17-5	Not available	LC50 > 100 mg/L - Pimephales promelas (96h) static LC50 13400 - 15100 mg/L - Pimephales promelas (96h) flow-through LC50 12.0 - 16.0 mL/L - Oncorhynchus mykiss (96h) static	LC50 9268 - 14221 mg/L - Daphnia magna (48h) EC50 = 2 mg/L - Daphnia magna (48h) Static

### 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

### 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

#### US DOT

Dangerous Goods? X

Proper Shipping Name: Corrosive liquid, flammable, n.o.s.

Hazard Class: 8

Subsidiary Class: 3

Packing Group: II

UN/ID Number: UN2920

Transport Label Required: Corrosive  
Flammable Liquid  
Marine Pollutant

Marine Pollutant

Technical Name (N.O.S.): Ethanol, gamma-aminopropyltriethoxy silane, Dibutyltin dilaurate

Comments: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or aircraft.

#### TRANSPORT CANADA

Dangerous Goods? X

Proper Shipping Name: Corrosive liquid, flammable, n.o.s.

Hazard Class: 8

Subsidiary Class: 3  
Packing Group: II  
UN Number: UN2920  
Transport Label Required: Corrosive  
Flammable Liquid  
Marine Pollutant

Marine Pollutant  
Technical Name (N.O.S.): Ethanol, gamma-aminopropyltriethoxy silane, Dibutyltin dilaurate

## ICAO / IATA

Dangerous Goods? X  
Proper Shipping Name: Corrosive liquid, flammable, n.o.s.  
Hazard Class: 8  
Subsidiary Class: 3  
Packing Group: II  
UN Number: UN2920  
Transport Label Required: Corrosive  
Flammable Liquid  
Marine Pollutant

Technical Name (N.O.S.): Ethanol, gamma-aminopropyltriethoxy silane, Dibutyltin dilaurate

Comments: Marine Pollutants-IATA Special Provision A197 when transported in single or combination packagings containing a net quantity per single or inner packaging of 5L or less for liquids or 5 kg for solids, are not subject to any provisions of these regulations. Note if the material also meets the criteria under additional hazard classes then all requirements continue to apply for those hazards.

## IMO

Dangerous Goods? X  
Proper Shipping Name: Corrosive liquid, flammable, n.o.s.  
Hazard Class: 8  
Subsidiary Class: 3  
UN Number: UN2920  
Packing Group: II  
Transport Label Required: Corrosive  
Flammable Liquid  
Marine Pollutant

Marine Pollutant  
Technical Name (N.O.S.): Ethanol, gamma-aminopropyltriethoxy silane, Dibutyltin dilaurate

Comments: Marine Pollutants -IMDG 2.10.2.7 when packaged in single or combination packagings, containing a net quantity per single or inner packaging of 5L or less for liquids or 5 kg for solids are not subject to any other provisions of this code. Note if the material also meets the criteria under additional hazard classes then all requirements continue to apply for those hazards.

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## 15. REGULATORY INFORMATION

### Inventory Information

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**European Economic Area (including EU):** Cytec has appointed an Only Representative to relieve our customers from their registration requirements under the REACH Regulation (EC) No. 1907/2006. Please contact us if you wish to benefit from the OR arrangement.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

**Switzerland:** All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 16-17).

**Taiwan:** All components of this product are included on the Taiwan Chemical Substance Inventory (TCSI) or are not required to be listed on the Taiwan inventory.

#### **OTHER ENVIRONMENTAL INFORMATION**

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA

#### **PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA**

- Acute
- Chronic
- Fire

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## **16. OTHER INFORMATION**

### **NFPA Hazard Rating (National Fire Protection Association)**

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

Instability: 1 - Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures.

Special: Water Reactive

**Reasons For Issue:** New Product

**Date Prepared:** 03/19/2016

**Date of last significant revision:** 03/19/2016

### **Component Hazard Phrases**

gamma-Aminopropyltriethoxy silane

- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H317 - May cause an allergic skin reaction.

Dibutyltin dilaurate

- H314 - Causes severe skin burns and eye damage.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H341 - Suspected of causing genetic defects.
- H360FD - May damage fertility. May damage the unborn child.
- H370 - Causes damage to organs.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

Titanium Dioxide

- H412 - Harmful to aquatic life with long lasting effects.

Ethanol

- H225 - Highly flammable liquid and vapor.
- H316 - Causes mild skin irritation.
- H319 - Causes serious eye irritation.
- H360 - May damage fertility or the unborn child.

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Prepared By: Legal & Compliance Services; E-mail: [custinfo@cytec.com](mailto:custinfo@cytec.com)

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This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

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## SAFETY DATA SHEET

### 1. IDENTIFICATION

<b>Product Name:</b>	<b>DAPCO™ 2200 Primerless Firewall Sealant, Part A</b>
<b>Product Description:</b>	Mixture of polysiloxanes and fillers
<b>Synonyms:</b>	None
<b>Chemical Family:</b>	Silicone
<b>Molecular Formula:</b>	Mixture
<b>Molecular Weight:</b>	Mixture
<b>Intended/Recommended Use:</b>	Engineered material sealant

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA  
**For Product and all Non-Emergency Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.**

**EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:**

**Asia Pacific:**

Australia - +61-3-9663-2130 or 1800-033-111 (IXOM)  
China (PRC) - +86 0532 83889090 (NRCC)  
New Guinea - +61-3-9663-2130 or 1800-033-111  
New Zealand - +61-3-9663-2130 or 0800-734-607 (IXOM)  
India, Japan, Korea, Malaysia, Thailand - +65 3158 1074 (Carechem24 Singapore)  
India (Hindi Speaking Only) - +65 3158 1198 or 000800 100 7479 (Carechem24 Singapore)

**Canada:** +1-905-356-8310 (Cytec Welland, Canada plant)

**Europe/Africa/Middle East (Carechem24 UK):**

Europe, Middle East, Africa, Israel - +44 (0) 1235 239 670  
(Arabic speaking countries) - +44 (0) 1235 239 671

**Latin America:**

Brazil - 0800 7077 022 (SUATRANS)  
Chile - +56-2-2-247-3600 (CITUC QUIMICO)  
All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

**USA:** +1-703-527-3887 or 1-800-424-9300 (CHEMTREC #CCN6083)

The ® indicates a Registered Trademark in the United States and the ™ indicates a trademark in the United States. The mark may also be registered, subject of an application for registration, or a trademark in other countries.

### 2. HAZARDS IDENTIFICATION

**GHS Classification**

Serious Eye Damage / Eye Irritation Hazard Category 1  
Skin Corrosion / Irritation Hazard Category 2

**LABEL ELEMENTS**



**Signal Word**  
Danger

**Hazard Statements**

Causes skin irritation  
Causes serious eye damage

**Precautionary Statements**

Wash face, hands and any exposed skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with plenty of soap and water.  
Specific treatment (see supplemental first aid instructions on this label).  
Take off all contaminated clothing and wash it before reuse.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.

**Hazards Not Otherwise Classified (HNOC), Other Hazards**

Not applicable

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance, Mixture or Article? Mixture

**HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification	Carcinogen
Frits 65997-18-4	< 5	Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)	OSHA(as Arsenic inorganic compounds) OSHA(as Cadmium compounds)
Calcium carbonate 471-34-1	30 - 60	Eye Dam. 1 (H318) Skin Irrit. 2 (H315)	-
Trimethylated silica 68909-20-6	< 5	Not Classified	-
Carbon 7440-44-0	< 5	Not Classified	-
Titanium Dioxide 13463-67-7	< 5	Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)	IARC 2B

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

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**4. FIRST AID MEASURES****DESCRIPTION OF FIRST AID MEASURES****Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

**Skin Contact:**

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

None known

**INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS**

**Notes To Physician:**

Formaldehyde is not a component of this product, however, heating to temperatures above 150 C in the presence of air may result in the release of formaldehyde. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Use water spray or fog, carbon dioxide or dry chemical.

**Extinguishing Media to Avoid:**

full water jet

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

**Special Hazards:**

None known

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:**

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. Refer to Section 8 (Exposure Controls/Personal Protection) for appropriate personal protective equipment.

**Methods For Cleaning Up:**

Sweep up into containers for disposal. Flush spill area with water.

**References to other sections:**

See Sections 8 and 13 for additional information.

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**7. HANDLING AND STORAGE**

**HANDLING**

**Precautions:** Wash hands thoroughly after handling. Wear protective gloves and eye/face protection.



**Special Handling Statements:** Heating to temperatures above 150 C (302 F) in the presence of air may result in the release of formaldehyde. Formaldehyde is a known animal carcinogen and is considered to be probably carcinogenic to humans by the International Agency for Research on Cancer and the National Toxicology Program. Formaldehyde is irritating to the eyes, nose, throat and skin and is a dermal sensitizer. The permissible exposure limit for formaldehyde should not be exceeded.

## STORAGE

Store in accordance with local, state, and federal regulations.

**Storage Temperature:** Store at <27 °C 80 °F

**Reason:** Quality.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

### Respiratory Protection:

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

### Eye Protection:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

### Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. Wear impermeable gloves and suitable protective clothing.

### Hand Protection:

Wear impermeable gloves. Replace gloves immediately when torn or any change in appearance (dimension, colour, flexibility etc) is noticed.

### Additional Advice:

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

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## Exposure Limit(s)

The below 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.

### 13463-67-7 Titanium Dioxide

OSHA (PEL): 15 mg/m<sup>3</sup> total dust (TWA)

ACGIH (TLV): 10 mg/m<sup>3</sup> (TWA)

Other Value: Not established

### 471-34-1 Calcium carbonate

OSHA (PEL): 15 mg/m<sup>3</sup> total dust (TWA)

5 mg/m<sup>3</sup> respirable fraction (TWA)

ACGIH (TLV): Not established

Other Value: Not established

### 65997-18-4 Frits

**13463-67-7 Titanium Dioxide**

OSHA (PEL):	10 µg/m <sup>3</sup> (TWA)(as Arsenic inorganic compounds) 50 µg/m <sup>3</sup> (TWA)(as Lead inorganic compounds) 0.5 mg/m <sup>3</sup> (TWA)(as Antimony compounds) 5 mg/m <sup>3</sup> (TWA)(as Zirconium compounds) 5 mg/m <sup>3</sup> (Ceiling)(as Manganese compounds) 10 µg/m <sup>3</sup> TWA(as Arsenic inorganic compounds) 5 µg/m <sup>3</sup> Action Level 30 µg/m <sup>3</sup> Action Level(as Lead inorganic compounds) 50 µg/m <sup>3</sup> TWA 5 µg/m <sup>3</sup> TWA(as Cadmium compounds) 2.5 µg/m <sup>3</sup> Action Level
ACGIH (TLV):	10 mg/m <sup>3</sup> Zr (STEL)(as Zirconium compounds) 0.01 mg/m <sup>3</sup> As (TWA)(as Arsenic inorganic compounds) 0.05 mg/m <sup>3</sup> Pb (TWA)(as Lead inorganic compounds) 0.01 mg/m <sup>3</sup> Cd (TWA)(as Cadmium compounds) 0.002 mg/m <sup>3</sup> respirable fraction Cd (TWA) 0.5 mg/m <sup>3</sup> Sb (TWA)(as Antimony compounds) 1 mg/m <sup>3</sup> dust and mist Cu (TWA)(as Copper compounds) 5 mg/m <sup>3</sup> Zr (TWA)(as Zirconium compounds) 0.02 mg/m <sup>3</sup> Mn (TWA)(as Manganese inorganic compounds) 0.1 mg/m <sup>3</sup> Mn (TWA)
Other Value:	Not established

**68909-20-6 Trimethylated silica**

OSHA (PEL):	5 mg/m <sup>3</sup> ceiling (Dow Corning)
ACGIH (TLV):	Not established
Other Value:	5 mg/m <sup>3</sup> ceiling (Dow Corning)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Color:</b>	blue
<b>Appearance:</b>	paste
<b>Odor:</b>	odorless
<b>Boiling Point:</b>	Not applicable
<b>Melting Point:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable
<b>Specific Gravity/Density:</b>	1.45
<b>Vapor Density:</b>	Not applicable
<b>Percent Volatile (% by wt.):</b>	0.5
<b>pH:</b>	Not applicable
<b>Saturation In Air (% By Vol.):</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility In Water:</b>	negligible
<b>Volatile Organic Content:</b>	Not applicable
<b>Flash Point:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Not available
<b>Flammable Limits (% By Vol):</b>	Not applicable
<b>Autoignition (Self) Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Partition coefficient (n-octanol/water):</b>	Not applicable
<b>Odor Threshold:</b>	Not available
<b>Viscosity (Kinematic):</b>	Not applicable

**DUST HAZARD INFORMATION**

<b>Particle Size (microns):</b>	Not applicable
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<b>Kst (bar-m/sec):</b>	Not applicable
<b>Maximum Explosion Pressure (Pmax):</b>	Not applicable
<b>Dust Class:</b>	Not applicable
<b>Minimum Ignition Energy (MIE) (mJ):</b>	Not applicable
<b>Minimum Ignition Temperature (MIT) (°C):</b>	Not applicable
<b>Minimum Explosive Concentration (MEC) (g/m³):</b>	Not applicable
<b>Limiting Oxygen Concentration (LOC) (%):</b>	Not applicable

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## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Conditions To Avoid:</b>	None known
<b>Polymerization:</b>	Will not occur
<b>Conditions To Avoid:</b>	None known
<b>Materials To Avoid:</b>	No specific incompatibility
<b>Hazardous Decomposition Products:</b>	Carbon dioxide Carbon monoxide (CO) calcium oxide Formaldehyde silicon dioxide

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## 11. TOXICOLOGICAL INFORMATION

### PRODUCT TOXICITY INFORMATION

**Likely Routes of Exposure:** Skin, Eyes, Oral.

#### ACUTE TOXICITY DATA

oral	rat	Acute LD50	>2000 mg/kg
dermal	rabbit	Acute LD50	>2000 mg/kg
inhalation	rat	Acute LC50 4 hr	>5 mg/l (Dust/Mist)

#### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	dermal	Irritating
Acute Irritation	eye	Causes serious damage

#### ALLERGIC SENSITIZATION

Sensitization	dermal	No data
Sensitization	inhalation	No data

#### GENOTOXICITY

##### Assays for Gene Mutations

Ames Salmonella Assay	No data
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#### OTHER INFORMATION

The product toxicity information above has been estimated.

#### HAZARDOUS INGREDIENT TOXICITY DATA

Calcium carbonate has an acute oral (rat) LD50 of 6.5 g/kg. Direct contact will cause moderate skin and severe eye irritation. Inhalation of dust can cause mild respiratory irritation.

Trimethylated silica, which is a unique form of fumed silica, is not expected to cause adverse health effects via inhalation, oral or dermal routes of exposure. Trimethylated silica does not cause the lung diseases crystalline silica is known to cause. The acute oral (rat) LD50 for fumed silica is 3.1 g/kg.

Carbon dust can be mildly irritating to the lungs; however, acute overexposure is not expected to cause adverse health effects.

Acute exposure to titanium dioxide dust is not likely to cause adverse effects. Chronic exposure to titanium dioxide may cause some lung fibrosis. Inhalation of titanium dioxide dust at 50 times the nuisance dust level caused lung fibrosis and a slight increase in lung tumor incidence in laboratory rats. When titanium dioxide was fed to rats and mice over lifetime in a carcinogen bioassay, it was not carcinogenic.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause cancer.

## 12. ECOLOGICAL INFORMATION

### TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

This material is not classified as dangerous for the environment.  
The ecological assessment for this material is based on an evaluation of its components.

### RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Frits 65997-18-4	Not available	Not available	Not available
Calcium carbonate 471-34-1	Not available	Not available	Not available
Trimethylated silica 68909-20-6	Not available	Not available	Not available
Carbon 7440-44-0	Not available	Not available	Not available
Titanium Dioxide 13463-67-7	Not available	Not available	Not available

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## 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

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## 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

### US DOT

Dangerous Goods? Not applicable/Not regulated

### TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

### IMO

Dangerous Goods? Not applicable/Not regulated

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## 15. REGULATORY INFORMATION

### Inventory Information

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**European Economic Area (including EU):** Cytec has appointed an Only Representative to relieve our customers from their registration requirements under the REACH Regulation (EC) No. 1907/2006. Please contact us if you wish to benefit from the OR arrangement.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

**Switzerland:** All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 16-17).

**Taiwan:** All components of this product are included on the Taiwan Chemical Substance Inventory (TCSI) or are not required to be listed on the Taiwan inventory.

**OTHER ENVIRONMENTAL INFORMATION**

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ(lbs)	S313	TSCA 12B
Frits 65997-18-4	< 5	None		Yes(as Arsenic inorganic compounds) Yes(as Vanadium compounds) Yes(as Lead inorganic compounds) Yes(as Barium compounds) Yes(as Cadmium compounds) Yes(as Silver compounds) Yes(as Zinc compounds) Yes(as Antimony compounds) Yes(as Copper compounds) Yes(as Manganese compounds) Yes(as Nickel compounds)	No

This product does not contain any components regulated under these sections of the EPA

**PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA**

- Acute

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**16. OTHER INFORMATION**

**NFPA Hazard Rating (National Fire Protection Association)**

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

**Reasons For Issue:** New Product

**Date Prepared:** 02/19/2016

**Date of last significant revision:** 02/16/2016

**Component Hazard Phrases**

Calcium carbonate

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Titanium Dioxide

H412 - Harmful to aquatic life with long lasting effects.

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