

# **Safety Data Sheet**

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## **SECTION 1: Identification**

#### **1.1. Product identifier**

3M<sup>TM</sup> Fire Barrier Water Tight Sealant 1000 NS and 1003 SL

## **Product Identification Numbers**

ID Number	UPC	ID Number	UPC
98-0400-5276-7	00-51115-11535-6	98-0400-5278-3	00-51115-11537-5
98-0400-5279-1	00-51115-11538-7	98-0400-5281-7	00-51115-11540-5
98-0400-5554-7	00-51115-18789-6	98-0400-5555-4	00-51115-18790-2

#### 1.2. Recommended use and restrictions on use

#### **Recommended use**

Fire Protection, This product is a watertight sealant that will help control the spread of fire, smoke and noxious gases.

## **1.3. Supplier's details**

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Industrial Adhesives and Tapes Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

## 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A. Skin Sensitizer: Category 1. Reproductive Toxicity: Category 2. Specific Target Organ Toxicity (repeated exposure): Category 2.

2.2. Label elements Signal word Warning

Symbols Exclamation mark | Health Hazard |



Hazard Statements Causes serious eye irritation. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure: blood or blood-forming organs | cardiovascular system |

## **Precautionary Statements**

## **Prevention:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

#### **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.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

#### Storage:

Store locked up.

## **Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

## 2.3. Hazards not otherwise classified

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines. This product may release methyl ethyl ketoxime (CAS 96-29-7) during curing and/or when exposed to water or humid air.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Calcium Carbonate	1317-65-3	15 - 40 Trade Secret *
Poly(Dimethylsiloxane)	63148-62-9	15 - 40 Trade Secret *
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	70131-67-8	15 - 40 Trade Secret *
Ketoxime Silane	22984-54-9	3 - 7 Trade Secret *
Amorphous Silica	7631-86-9	0.5 - 5 Trade Secret *
(Trimethoxysilylpropyl)Ethylenediamine	1760-24-3	0.5 - 1.0 Trade Secret *

Octamethylcyclotetrasiloxane	556-67-2	<= 0.1 Trade Secret *
Quartz silica	14808-60-7	<= 0.1 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1. Information on toxicological effects.

# 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

# **SECTION 5: Fire-fighting measures**

## 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

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

None inherent in this product.

## Hazardous Decomposition or By-Products

<u>Substance</u> Formaldehyde Carbon dioxide Oxides of Nitrogen <u>Condition</u> During Combustion During Combustion During Combustion

## **5.3. Special protective actions for fire-fighters**

No special protective actions for fire-fighters are anticipated.

# **SECTION 6: Accidental release measures**

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

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

## 6.2. Environmental precautions

Avoid release to the environment.

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

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

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

Store away from acids. Store away from strong bases. Store away from oxidizing agents.

# **SECTION 8: Exposure controls/personal protection**

#### **8.1.** Control parameters

#### **Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Calcium Carbonate	1317-65-3	OSHA	TWA(as total dust):15	
			mg/m3;TWA(respirable fraction):5 mg/m3	
Quartz silica	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz silica	14808-60-7	OSHA	TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:0.05 mg/m3	
Octamethylcyclotetrasiloxane	556-67-2	AIHA	TWA:10 ppm	
SILICA, AMORPHOUS	7631-86-9	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

#### **8.2. Exposure controls**

#### **8.2.1.** Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

## **8.2.2.** Personal protective equipment (PPE)

## Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Indirect Vented Goggles

#### **Skin/hand protection**

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

#### **Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

7.1. Information on basic physical and chemical p	•
General Physical Form:	Solid
Specific Physical Form:	Paste
Odor, Color, Grade:	Low odor, light gray, thixotropic caulk
Odor threshold	No Data Available
Melting point	No Data Available
Flash Point	> 212 °F [ <i>Test Method:</i> Closed Cup]
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Vapor Pressure	< 5 mmHg [@ 25 °C]
Specific Gravity	1.31 - 1.33 [ <i>Ref Std:</i> WATER=1]
Solubility in Water	Nil
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Molecular weight	No Data Available
Volatile Organic Compounds	<=4 % weight [ <i>Test Method:</i> tested per EPA method 24]
VOC Less H2O & Exempt Solvents	<=53 g/l [ <i>Test Method:</i> tested per EPA method 24]

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

**10.2. Chemical stability** Stable.

## 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

# **10.4. Conditions to avoid** Not determined

**10.5. Incompatible materials** Strong acids Strong bases Strong oxidizing agents

10.6. Hazardous decomposition products <u>Substance</u>

None known.

**Condition** 

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

#### Based on test data and/or information on the components, this material may produce the following health effects:

## Inhalation:

No health effects are expected. Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

## **Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

## Eye Contact:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May cause additional health effects (see below).

## **Additional Health Effects:**

#### Prolonged or repeated exposure may cause target organ effects:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Hematopoietic Effects: Signs/symptoms may include generalized weakness, fatigue and alterations in numbers of circulating blood cells.

#### **Reproductive/Developmental Toxicity:**

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

#### **Carcinogenicity:**

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYS AIRRESP	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
Quartz silica	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

#### **Additional Information:**

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

#### **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

## Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-	Rat	LC50 3 mg/l
	Dust/Mist		
	(4 hours)		
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Dermal	Rabbit	LD50 > 16,000 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Ingestion	Rat	LD50 > 64,000 mg/kg
Poly(Dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(Dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg
Amorphous Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous Silica	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Amorphous Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Ketoxime Silane	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Ketoxime Silane	Ingestion	Rat	LD50 2,260 mg/kg
(Trimethoxysilylpropyl)Ethylenediamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
(Trimethoxysilylpropyl)Ethylenediamine	Inhalation-	Rat	LC50 >1.49, <2.44 mg/l
	Dust/Mist		
	(4 hours)		
(Trimethoxysilylpropyl)Ethylenediamine	Ingestion	Rat	LD50 1,897 mg/kg
Quartz silica	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Quartz silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Octamethylcyclotetrasiloxane	Dermal	Rat	LD50 > 2,400 mg/kg
Octamethylcyclotetrasiloxane	Inhalation-	Rat	LC50 36 mg/l
	Dust/Mist		-
	(4 hours)		
Octamethylcyclotetrasiloxane	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

#### **Skin Corrosion/Irritation**

Name	Species	Value

Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Amorphous Silica	Rabbit	No significant irritation
(Trimethoxysilylpropyl)Ethylenediamine	Rabbit	Mild irritant
Octamethylcyclotetrasiloxane	Rabbit	Minimal irritation
Quartz silica	Professio	No significant irritation
	nal	
	judgeme	
	nt	

## Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Amorphous Silica	Rabbit	No significant irritation
(Trimethoxysilylpropyl)Ethylenediamine	Rabbit	Corrosive
Octamethylcyclotetrasiloxane	Rabbit	No significant irritation

### **Skin Sensitization**

Name	Species	Value
Amorphous Silica	Human	Not sensitizing
	and	
	animal	
(Trimethoxysilylpropyl)Ethylenediamine	Multiple	Sensitizing
	animal	
	species	
Octamethylcyclotetrasiloxane	Human	Not sensitizing
	and	
	animal	

## **Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

#### **Germ Cell Mutagenicity**

Name	Route	Value	
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	In Vitro	Not mutagenic	
Amorphous Silica	In Vitro	Not mutagenic Not mutagenic	
Octamethylcyclotetrasiloxane	In Vitro	Some positive data exist, but the data are not sufficient for classification	
Quartz silica	In Vitro	Some positive data exist, but the data are not sufficient for classification	
Quartz silica	In vivo	Some positive data exist, but the data are not sufficient for classification	

## Carcinogenicity

Name	Route	Species	Value
Amorphous Silica	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
Quartz silica	Inhalation	Human	Carcinogenic
		and	
		animal	

## **Reproductive Toxicity**

# **Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Amorphous Silica	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509	1 generation

Amorphous Silica	Ingestion	Not toxic to male reproduction	Rat	mg/kg/day NOAEL 497 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesi s
Octamethylcyclotetrasiloxane	Inhalation	Not toxic to male reproduction	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasiloxane	Ingestion	Toxic to female reproduction	Rabbit	NOAEL 50 mg/kg/day	during organogenesi s
Octamethylcyclotetrasiloxane	Inhalation	Toxic to female reproduction	Rat	NOAEL 3.6 mg/l	2 generation

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	All data are negative	Rat	NOAEL 0.812 mg/l	90 minutes
(Trimethoxysilylpropyl)Eth ylenediamine	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	

## Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Amorphous Silica	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
Octamethylcyclotetrasiloxa ne	Dermal	hematopoietic system	All data are negative	Rabbit	NOAEL 960 mg/kg/day	3 weeks
Octamethylcyclotetrasiloxa ne	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasiloxa ne	Inhalation	endocrine system   immune system   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasiloxa ne	Inhalation	hematopoietic system	All data are negative	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasiloxa ne	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,600 mg/kg/day	2 weeks
Quartz silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

#### **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

# Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

## **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

# **SECTION 13: Disposal considerations**

## **13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

## EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: Regulatory information**

## **15.1. US Federal Regulations**

Contact 3M for more information.

## 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

## This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	<u>C.A.S. No</u>	<b>Regulation</b>	<u>Status</u>
Octamethylcyclotetrasiloxane	556-67-2	Toxic Substances Control Act (TSCA) 4	Applicable
		Test Rule Chemicals	

#### **15.2. State Regulations**

Contact 3M for more information.

#### **California Proposition 65**

Ingredient Methyl Alcohol

```
<u>C.A.S. No.</u>
67-56-1
```

Classification Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### **15.3.** Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

#### **15.4. International Regulations**

Contact 3M for more information.

## This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: Other information**

#### NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

## **HMIS Hazard Classification Health:** 2 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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