

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Material Identification: MicroGuard AD708 Hard Tile Clear Gloss Treatment (Part A)			
Adsil, Inc. 1901 Mason Avenue, Suite 101 Daytona Beach, FL 32117	386-274-1382 PHONE 386-274-1798 FAX CHEMTREC: 1-800-424-9300		
SECTION 2: OSHA HAZARDOUS COMPONENTS			
<u>C.A.S. Number(s)</u>	<u>Wt%</u>	<u>Components</u>	<u>Exposure Limits</u>
Mixture - Proprietary	98%	Alkoxysilanes	No exposure limits established
67-56-1	2%	Methyl Alcohol	OSHA PEL (final rule) and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.
The above components are hazardous as defined in 29CFR 1910.1200. NFPA/HMIS Code: Health 1, Flammability 3, Reactivity 0			
SECTION 3: PHYSICAL DATA FOR MATERIAL			
pH: Not Applicable (non-aqueous) Solubility in water: None Appearance: Clear Liquid Odor: Strong Odor Specific Gravity @ 25C: 0.95 Boiling Point: >35° C., >95° F. VOC Content: 581 g/liter (Components A, B, C mixed kit); 605 g/liter (thinned) Method 24.			
SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL			
Flash Point: 46.9° F./8.3° C. Fire Hazards: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products; Silicon Dioxide, Carbon Dioxide and traces of incompletely burned carbon compounds, formaldehyde. Unusual Fire Hazards: Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding and grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources. Extinguishing Media: Carbon Dioxide (CO ₂), Water Fog, Dry Chemical. Fire Fighting Procedures: Self contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. Heat exposure pressurizes closed containers. Evacuate the area in cases of overheating or fire.			
SECTION 5: HEALTH & HAZARD DATA			
Eye Contact: Causes eye irritation. Skin Contact: Causes skin irritation. Inhalation: Spray mist causes damage to respiratory tract. Ingestion: Product generates methyl alcohol, which may cause blindness and possibly death if swallowed. Signs & Symptoms of Exposure: Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).			

Special Hazards: Carcinogens – none known
 Teratogens – none known
 Mutagens – none known
 Reproductive Toxins – none known
 Sensitizers – When heated to temperatures above 150° C. in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer and an irritant to the eyes, nose, throat, skin and digestive system.

Warning: Product will give off additional methyl alcohol when exposed to moisture or humidity.

Comments: Methyl Alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposure within guidelines of OSHA PEL:

TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

SECTION 6: FIRST AID MEASURES

Eyes: Immediately flush with water for 15 minutes. Get medical attention.

Skin: No first aid should be needed.

Inhalation: Remove to fresh air. Get medical attention if ill effects persist.

Oral: Get immediate medical attention. If conscious, give lukewarm water (pint or ½ liter). Do not induce vomiting. Lie down, keep warm and cover eyes to exclude light.

Comments: Treat same as methyl alcohol poisoning.

SECTION 7: REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Materials to Avoid: Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, halogens and halogen compounds.

SECTION 8: LEAK OR SPILL INFORMATION

Containment/Clean-up: Disposal of collected product, residues and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent spontaneous combustion, store rags, mops, absorbent, etc; used during cleanup only in appropriate containers or covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as; washing with mild, caustic detergents or solutions; or high-pressure steam for larger areas. Observe any safety precautions applicable to the cleaning material used.

SECTION 9: SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use respiratory protection unless adequate local exhaust ventilation is provided or air-sampling data show exposures are within recommended exposure guidelines. Industrial hygiene personnel can assist in judging the adequacy of existing engineering controls.

Gloves: Washing at mealtime and end of shift; no special protection is needed.

Eye Protection: Safety glasses at a minimum.

Protective Equipment: Eyewash station (bottle) should be within direct access of work area.

Personal Hygiene: Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly after handling. Wash contaminated clothing before reuse.

SECTION 10: TRANSPORT INFORMATION**DOT Information** (49 CFR 172.101)**Proper Shipping Name:** COATING SOLUTION**Hazard Technical Name:** ALKOXYSILANES**Hazard Class:** 3**UN Number:** UN1139**Packing Group:** II**SECTION 11: HANDLING & STORAGE****Handling:** No special precautions.**Storage:** Keep the container closed and away from heat, sparks and open flame. Store away from water or moisture.**SECTION 12: REGULATORY INFORMATION****TSCA Status:** All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.**EPA SARA Title III Chemical Listings:****Section 302 CERCLA Extremely Hazardous Substances:** None**Section 304 CERCLA Hazardous Substances:** None**Section 312 Hazard Class:**

Acute: Yes

Chronic: Yes

Fire: Yes

Pressure: No

Reactive: No

Section 313 Toxic Chemicals:

<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
67-56-1	2.0	Methyl Alcohol

Supplemental State Compliance Information: California**Warning:** This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Revision Date: 05/07**Prepared by:** Adsil MSDS Coordinator
Daytona Beach, Florida 32117
386-274-1382

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Material Identification: MicroGuard AD708 Hard Tile Clear Gloss Treatment (Part B)			
Adsil, Inc. 1901 Mason Avenue, Suite 101 Daytona Beach, FL 32117		386-274-1382 PHONE 386-274-1798 FAX CHEMTREC: 1-800-424-9300	
SECTION 2: OSHA HAZARDOUS COMPONENTS			
<u>C.A.S. Number(s)</u>	<u>Wt%</u>	<u>Components</u>	<u>Exposure Limits</u>
7732-18-5	95-98%	Distilled Water	Not Applicable
64-19-7	2-5%	Acetic Acid	TWA 10 ppm, STEL n/e
NFPA/HMIS Code: Health 0, Flammability 0, Reactivity 0			
SECTION 3: PHYSICAL DATA FOR MATERIAL			
<p>pH: 4.0 (+/- 0.5) Solubility in water: N/A Appearance: Clear Liquid Odor: Slight Vinegar Specific Gravity @ 25°C: 1.00 Boiling Point: 100° C., 212° F. VOC Content: None</p>			
SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL			
<p>Flash Point: None Fire Hazards: None Unusual Fire Hazards: None Extinguishing Media: Not Flammable Fire Fighting Procedures: Not Applicable</p>			
SECTION 5: HEALTH & HAZARD DATA			
<p>Eye Contact: Causes moderate eye irritation. Skin Contact: Causes mild skin irritation. Inhalation: None Ingestion: None Signs & Symptoms of Exposure: None Special Hazards: Carcinogens – none known Teratogens – none known Mutagens – none known Reproductive Toxins – none known</p>			
SECTION 6: FIRST AID MEASURES			
<p>Eyes: None should be required. If mild discomfort occurs, flush with clean water. Skin: None Inhalation: None Oral: None Comments: No first aid measures should be necessary for distilled water and <5% acetic acid exposures.</p>			

SECTION 7: REACTIVITY DATA	
Stability: Stable. Hazardous Polymerization: Will not occur. Conditions to Avoid: None known. Materials to Avoid: None.	
SECTION 8: LEAK OR SPILL INFORMATION	
Containment/Clean-up: Not Applicable.	
SECTION 9: SPECIAL PROTECTION INFORMATION	
Respiratory Protection: None Gloves: None Eye Protection: None Protective Equipment: None Personal Hygiene: None	
SECTION 10: TRANSPORT INFORMATION	
DOT Information (49 CFR 172.101) Proper Shipping Name: Not a regulated material. Hazard Technical Name: None Hazard Class: Not a regulated material. UN Number: None Packing Group: Not a regulated material.	
SECTION 11: HANDLING & STORAGE	
Handling: None	Storage: None. Keep from freezing.
SECTION 12: REGULATORY INFORMATION	
EPA SARA Title III Chemical Listings: Section 302 CERCLA Extremely Hazardous Substances: Not Applicable. Section 304 CERCLA Hazardous Substances: Not Applicable. Section 312 Hazard Class: Acute: No Chronic: No Fire: No Pressure: No Reactive: No Section 313 Toxic Chemicals: Not Applicable. Supplemental State Compliance Information: California Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm. None known.	
Revision Date: 02/07	Prepared by: Adsil - MSDS Coordinator Daytona Beach, Florida 32117 (PH: 386-274-1382)

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION			
Material Identification: MicroGuard AD708 Hard Tile Clear Gloss Treatment (Part C)			
Adsil, Inc. 1901 Mason Avenue, Suite 101 Daytona Beach, FL 32117		386-274-1382 PHONE 386-274-1798 FAX CHEMTREC: 1-800-424-9300	
SECTION 2: OSHA HAZARDOUS COMPONENTS			
<u>C.A.S. Number(s)</u>	<u>Wt%</u>	<u>Components</u>	<u>Exposure Limits</u>
67-63-0	34-36%	Isopropyl Alcohol	TWA 400 ppm, STEL 500 ppm
52125-53-8	28-32%	Glycol Ether PE	Not Established
1569-01-3	28-32%	Glycol Ether PNP	Not Established
1760-24-3	4-6%	Ethylene diaminepropyl trimethoxysilane	TWA 50 ppm
NFPA/HMIS Code: Health 1, Flammability 3, Reactivity 0			
SECTION 3: PHYSICAL DATA FOR MATERIAL			
<p>pH: Not Applicable (non-aqueous) Solubility in water: None Appearance: Colorless to Pale Yellow Odor: Strong Odor (alcohol) Specific Gravity @ 25° C: 0.79 Boiling Point: 88° C., 190° F. VOC Content: 581 g/liter (Components A, B, C mixed); 605 g/liter (thinned); Method 24.</p>			
SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL			
<p>Flash Point: 58.0° F./12.8° C. Fire Hazards: Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding and grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources. Unusual Fire Hazards: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Silicon Dioxide, Carbon Dioxide and traces of incompletely burned carbon compounds, Nitrogen Oxides, Formaldehyde. Extinguishing Media: Carbon Dioxide (CO₂), Water Fog, Dry Chemical Fire Fighting Procedures: Self contained breathing apparatus and protective clothing should be worn when fighting fires involving chemicals. Heat exposure pressurizes closed containers. Evacuate the area in cases of overheating or fire.</p>			
SECTION 5: HEALTH & HAZARD DATA			
<p>Eye Contact: Causes eye irritation. Skin Contact: Causes skin irritation. Inhalation: Spray mist causes damage to respiratory tract. Ingestion: Product generates methyl alcohol, which may cause blindness and possibly death if swallowed. Signs & Symptoms of Exposure: Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).</p>			

Special Hazards: Carcinogens – none known
Teratogens – none known
Mutagens – none known
Reproductive Toxins – none known
Sensitizers – When heated to temperatures above 150° C. in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard; a known skin and respiratory sensitizer; and an irritant to the eyes, nose, throat, skin and digestive system.

Comments: Methyl Alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposure within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

SECTION 6: FIRST AID MEASURES

Eyes: Immediately flush with clean water for 15 minutes.

Skin: No first aid should be needed.

Inhalation: Remove to fresh air. Get medical attention if ill effects persist.

Oral: Get medical attention, immediately. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. If large quantity swallowed, give ½ liter of lukewarm water if victim is conscious.

Comments: Treat the same as methyl alcohol poisoning.

SECTION 7: REACTIVITY DATA

Stability: Stable.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form, as described in Section 5.

SECTION 8: LEAK OR SPILL INFORMATION

Containment/Clean-up: Disposal of collected product, residues and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc; used during cleanup only in appropriate containers or covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for larger areas. Observe any safety precautions applicable to the cleaning material used.

Use self contained breathing apparatus and suitable protective wear, such as full-face respirator.

SECTION 9: SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use respiratory protection unless adequate local exhaust ventilation is provided or air-sampling data show exposures are within recommended exposure guidelines. Industrial hygiene personnel can assist in judging the adequacy of existing engineering controls.

Gloves: Washing at mealtime and end of shift. No other special protection is needed.

Eye Protection: Safety Glasses at a minimum.

Protective Equipment: Eyewash station (bottle) should be within direct access of work area.

Personal Hygiene: Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

SECTION 10: TRANSPORT INFORMATION

DOT Information (49 CFR 172.101)

Proper Shipping Name: COATING SOLUTION

Hazard Technical Name: SOLVENT MIXTURE

Hazard Class: 3

UN Number: UN1139

Packing Group: II

SECTION 11: HANDLING & STORAGE

Handling: No special precautions.

Storage: Keep the container closed and away from heat, sparks and open flame. Store away from water or moisture.

SECTION 12: REGULATORY INFORMATION

TSCA Status: All chemical substances in this material are included on or exempt from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings:

Section 302 CERCLA Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances: None

Section 312 Hazard Class:

Acute: Yes

Chronic: Yes

Fire: Yes

Pressure: No

Reactive: No

Section 313 Toxic Chemicals: None

Supplemental State Compliance Information:**California**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

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Revision Date: 05/07

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