

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Material Identification: MicroGuard Clear Finish Restorer AD110 (Part A)

Adsil
P.O. Box 353880
Palm Coast, FL 32135-3880

386-445-8239 PHONE
386-445-0471 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 | TWA 50 ppm, PEL 10 ppm |
| 67-56 1 | 2% | Methyl Alcohol | OSHA PEL (final rule) and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm. |

NEPA/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: 4.2 lbs./gal., 507 g./liter (Components A, B, C mixed kit)

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 (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.

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) to dilute ingested material. 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.

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, 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: FLAMMABLE LIQUID, n.o.s.

Hazard Technical Name: METHOXYSILANE/METHANOL

Hazard Class: 3

UN Number: UN1993

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

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances:

| <u>C.A.S. Number</u> | <u>Wt%</u> | <u>Component Name</u> |
|----------------------|------------|-----------------------|
| 67-56-1 | 2% | Methyl Alcohol |

Section 312 Hazard Class:

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

| <u>C.A.S. Number</u> | <u>Wt%</u> | <u>Component Name</u> |
|----------------------|------------|-----------------------|
| 67-56-1 | 2% | Methyl Alcohol |

Revision Date: 05/01/03

Prepared by: Adsil MSDS Coordinator
Palm Coast, Florida 32137
386-445-8239

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Material Identification: MicroGuard Clear Finish Restorer AD110 (Part B)

Adsil
P.O. Box 353880
Palm Coast, FL 32135-3880

386-445-8239 PHONE
386-445-0471 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

pH: 6.0
Solubility in water: N/A
Appearance: Clear Liquid
Odor: Slight
Specific Gravity @ 25°C: 1.00
Boiling Point: 100° C., 212° F.
VOC Content: None

SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL

Flash Point: None
Fire Hazards: None
Unusual Fire Hazards: None
Extinguishing Media: Not Flammable
Fire Fighting Procedures: Not Applicable

SECTION 5: HEALTH & HAZARD DATA

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

SECTION 6: FIRST AID MEASURES

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.

SECTION 7: REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None
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: Not a regulated material.
Section 304 CERCLA Extremely Hazardous Substances: Not a regulated material.
Section 304 CERCLA Hazardous Substances: Not a regulated material.
Section 312 Hazard Class:
Acute: No
Chronic: No
Fire: No
Pressure: No
Reactive: No
Section 313 Toxic Chemicals: Not a regulated material.

Revision Date: 05/01/03

Prepared by: Adsil MSDS Coordinator
Palm Coast, Florida 32137
386-445-8239

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Material Identification: MicroGuard Clear Finish Restorer AD110 (Part C)

Adsil
P.O. Box 353880
Palm Coast, FL 32135-3880

386-445-8239 PHONE
386-445-0471 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 |
| 1569-02-4 | 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

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: 4.2 lbs./gal., 507 g./liter (Components A, B, C mixed)

SECTION 4: FIRE & EXPLOSION HAZARD OF MATERIAL

Flash Point: 53.0° F/12.0° 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.

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.

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. If conscious, give lukewarm water (pint or ½ liter) to dilute ingested material. Do not induce vomiting.

Comments: Treat the same as methyl alcohol poisoning.

SECTION 7: REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None

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: FLAMMABLE LIQUID, n.o.s.

Hazard Technical Name: (Contains Isopropanol)

Hazard Class: 3

UN Number: UN1993

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

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substances: None

Section 304 CERCLA Hazardous Substances:

| <u>C.A.S. Number</u> | <u>Wt%</u> | <u>Component Name</u> |
|----------------------|------------|-----------------------|
| 67-56-1 | 2% | Methyl Alcohol |

Section 312 Hazard Class:

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: No

Section 313 Toxic Chemicals:

| <u>C.A.S. Number</u> | <u>Wt%</u> | <u>Component Name</u> |
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| 67-56-1 | 2% | Methyl Alcohol |

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