Safety Data Sheet

Issue Date: 01-Feb-2013 Revision Date: 07-May-2014 Version 1

1. IDENTIFICATION

Product Identifier

Product Name MicroKleen AD 103 Retarder Solvent

Other means of identification

SDS # ADSIL-028 **UN/ID No** UN1219

Recommended use of the chemical and restrictions on use

Recommended Use Dilution solvent.

Details of the supplier of the safety data sheet

Supplier Address

Adsil, Inc.

1901 Mason Avenue, Suite #101 Daytona Beach, FL 32117

Emergency Telephone Number

Company Phone Number Phone: 800-549-2539

Fax: 386-274-1798

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless liquid Physical State Liquid Odor Strong Alcohol

Classification

Acute toxicity - Oral Specific target organ toxicity (single exposure)

Flammable Liquids

Category 4 Category 1 Category 4

illiable Liquids

Signal Word Danger

Hazard Statements

Harmful if swallowed Causes damage to organs Highly flammable liquid and vapor





Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof equipment Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF SWALLOWED: Rinse mouth.

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store in a cool, dry area and away from heat, sparks and open flame.

Store in a well-ventilated place.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

None.

Unknown Acute Toxicity

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Isopropyl Alcohol	67-63-0	38-42%
Glycol Ether PE	52125-53-8	28-32%
Glycol Ether PNP	1569-01-3	28-32%

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

immediate medical attention.

Skin Contact Wash with soap and water. Consult a doctor if skin irritation is permanent.

Inhalation Remove to fresh air. Get medical attention if discomfort persists.

Ingestion If swallowed, rinse mouth with water. Do not induce vomiting. Get immediate medical

attention.

Most important symptoms and effects

Symptoms May cause skin and eye irritation. Prolonged exposure in poorly ventilated area may cause

respiratory irritation. Ingestion may cause abdominal pain and vomiting. Liver damage may

also occur.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat as isopropyl alcohol poisoning.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO2). Water. Foam. Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Vapors are heavier than air and may spread along floors. Vapors may travel to source of ignition and flash back. Closed containers may explode due to buildup of pressure when exposed to extreme heat.

Hazardous Combustion Products Carbon oxides. Traces of incompletely burned carbon compounds. Formaldehyde.

Sensitivity to Static Discharge Sensitive to static discharge.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area and fight fire from a safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal PrecautionsUse personal protective equipment as required. Remove all sources of ignition.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-UpContain and collect with an inert absorbent and place into an appropriate container for

disposal. Rinse area thoroughly. Clean up in accordance with all applicable regulations.

Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8.

Do not eat, drink or smoke when using this product. Do not breathe

dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces.

— No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond

container and receiving equipment. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from

sources of ignition.

Incompatible Materials Strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name **ACGIH TLV OSHA PEL NIOSH IDLH** STEL: 500 ppm Isopropyl Alcohol TWA: 400 ppm IDLH: 400 ppm TWA: 400 ppm TWA: 400 ppm STEL: 500 ppm Glycol Ether PE STEL: 100ppm IDLH: 150ppm TWA: 150ppm TWA: 150ppm Glycol Ether PNP STEL: 100ppm TWA: 150ppm IDLH: 150ppm TWA: 150ppm

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Eyewash

stations. For in field installations, use local exhaust ventilation when using in enclosed areas. For spray booth installations, provide air-sampling data to show exposures are within

recommended exposure guidelines.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Chemical splash goggles or face shield.

Skin and Body Protection Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Wash hands before breaks and immediately after handling the product. Wash contaminated

clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceColorless liquidOdorStrong AlcoholColorNot determinedOdor ThresholdNot determined

Property Values Remarks • Method

Not applicable (non-aqueous)

Melting Point/Freezing PointNot availableBoiling Point/Boiling Range82.5°C / 180.5°F

Flash Point 11.7°C/53.0 °F – 12.8°C/55.0°F

Evaporation Rate Not determined Flammability (Solid, Gas) Flammable **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined **Vapor Density** Not determined Specific Gravity 0.846a/ml Water Solubility Soluble in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined **VOC Content** 780.0 g/L

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Methanol forms when exposed to water or humid air.

Hazardous Polymerization Hazardous polymerization will not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion Harmful if swallowed.

Component Information

 Chemical Name
 Oral LD50
 Dermal LD50
 Inhalation LC50

 Isopropyl Alcohol
 3600 mg/kg (Mouse)
 12800 mg/kg (Rabbit)
 16000ppm (8 hrs Rat)

 Glycol Ether PE
 39000 mg/kg (Rat)
 20000 mg/kg (Rabbit)
 No Data

Glycol Ether PNP 5710 mg/kg (Rat) 12930 mg/kg (Rat) 16300ppm (4 hrs Rat)

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.

STOT - single exposure None.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not considered immediately toxic to aquatic life.

Chemical Name Algae/aquatic plants Fish Toxicity to Crustacea microorganisms

Isopropyl Alcohol No Data 28200: 96 h Pimephales No Data No Data promelas mg/L LC50 flow-

through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 -20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-

through

Persistence/Degradability

Not readily biodegradable.

Bioaccumulation

Not determined.

Mobility

Chemical Name Partition Coefficient N/A N/A

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

US EPA Waste Number

Chemical Name RCRA RCRA - Basis for Listing RCRA - D Series Wastes RCRA - U Series Wastes

N/A No Data

California Hazardous Waste Status

N/A

Chemical Name California Hazardous Waste Status

N/A

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN1219

Proper Shipping Name Coating solution

Hazard Class 3
Packing Group ||

<u>IATA</u>

UN/ID No UN1219

Proper Shipping Name Coating solution

Hazard Class 3
Packing Group II

IMDG

UN1219

Proper Shipping Name Coating solution

Hazard Class 3
Packing Group ||

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA All ingredients are listed or exempt from listing on Chemical Substance Inventory

DSL Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

CERCLA

Chemical Name Hazardous Substances RQs CERCLA/SARA RQ Reportable Quantity (RQ)

N/A N/A

SARA 311/312 Hazard Categories

Acute Health Hazard No
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

SARA 313

Chemical NameCAS NoWeight-%SARA 313 - Threshold Values %Isopropyl Alcohol67-63-036.0%Fire Hazard/Acute Health Hazard

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name California Proposition 65
Isopropyl Alcohol N/A

U.S. State Right-to-Know Regulations

Chemical NameNew JerseyMassachusettsPennsylvaniaN/AN/AN/A

16. OTHER INFORMATION

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards230Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection230Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet