



SAFETY DATA SHEET

1. Identification

Product identifier	Andisil® 172 Silane	DISTRIBUTED BY: R.E. CARROLL, INC.
Other means of identification		1570 NORTH OLDEN AVENUE EXT.
Product code	8268	EWING N.J. 08638-3204 USA
Recommended use	Crosslinker/moisture scavenger.	609-695-6211/800-257-9365 Orders@RECarroll.com
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	AB Specialty Silicones LLC	
Address	3725 Hawthorn Court Waukegan, IL 60087 US General Assistance:	
Telephone	info@Andisil.com Health &	847-599-7765
E-mail	Safety Manager 24 hour:	
Contact person	CHEMTREC	
Emergency phone number	800-424-9300	

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, dermal	Category 4
	Serious eye damage/eye irritation	Category 2
	Reproductive toxicity	Category 1B
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Combustible liquid. Causes serious eye irritation. Suspected of damaging fertility or the unborn child.
Precautionary statement	
Prevention	Keep away from flames and hot surfaces. - No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Response	Call a poison center/doctor if you feel unwell.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Vinyltris(2-methoxyethoxy)silane	1067-53-4	60 - 100
2-methoxyethanol	109-86-4	< 1

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Get medical attention if any discomfort occurs.
Skin contact	Wash off with soap and water. Take off immediately all contaminated clothing. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.
Ingestion	Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention if any discomfort occurs.
Most important symptoms/effects, acute and delayed	Causes serious eye irritation. Symptoms include itching, burning, redness, and tearing of eyes. May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility based on animal data.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 ° F (150 ° C) and above, in atmospheres which contain oxygen.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Specific methods	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). In case of spills, beware of slippery floors and surfaces. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will spread on the water surface. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see Section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact during pregnancy/while nursing. Avoid contact with eyes, skin, and clothing. Keep away from open flames, hot surfaces and sources of ignition. Ground container and transfer equipment to eliminate static electric sparks. Provide adequate ventilation. Wear appropriate personal protective equipment. Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Conditions for safe storage, including any incompatibilities	Follow rules for combustible liquids. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Store locked up. Store in original tightly closed container.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-methoxyethanol (CAS 109-86-4)	PEL	80 mg/m ³ 25 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-methoxyethanol (CAS 109-86-4)	TWA	0.1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-methoxyethanol (CAS 109-86-4)	TWA	0.3 mg/m ³ 0.1 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-methoxyethanol (CAS 109-86-4)	1 mg/g	2-Methoxyacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-methoxyethanol (CAS 109-86-4) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-methoxyethanol (CAS 109-86-4) Skin designation applies.

US - Tennessee OELs: Skin designation

2-methoxyethanol (CAS 109-86-4) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

2-methoxyethanol (CAS 109-86-4) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

2-methoxyethanol (CAS 109-86-4) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-methoxyethanol (CAS 109-86-4) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

This product may be capable of generating 0.1 ppm or greater formaldehyde vapors under certain use conditions. According to OSHA 29 CFR 1910.1048, formaldehyde vapors may be considered hazardous if workplace airborne concentrations exceed 0.1 ppm.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear suitable protective clothing.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. No protection is ordinarily required under normal conditions of use and with adequate ventilation. If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor mist respirator. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Yellow.
Odor	Characteristic ester odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	545 °F (285 °C) @ 760 mm Hg
Flash point	197.6 °F (92.0 °C) Pensky-Martens Closed Cup
Evaporation rate	< 1 (n-butyl acetate = 1)
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	< 5 mm Hg (20 °C)
Vapor density	> 1 (25 °C / 77 °F) (Air = 1)
Relative density	1.04 (25 °C)
Solubility(ies)	
Solubility (water)	Insoluble (in water).
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Percent volatile	Not determined.
VOC (Weight %)	1040 g/l Calculated.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
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Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Keep away from sources of ignition - No smoking.
Incompatible materials	Strong oxidizing agents. Moisture.
Hazardous decomposition products	Carbon oxides. Silicon oxides. Methylpolysiloxanes can generate formaldehyde at approximately 300 degrees Fahrenheit (150 °C) and above, in atmospheres which contains oxygen.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No inhalation hazard under normal conditions.
Skin contact	Harmful in contact with skin.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Causes serious eye irritation. Symptoms include itching, burning, redness, and tearing of eyes. May cause reproductive effects.

Information on toxicological effects

Acute toxicity	Harmful in contact with skin.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation. Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Due to lack of data the classification is not possible.
Skin sensitization	Due to lack of data the classification is not possible.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not listed by ACGIH, IARC, NIOSH, NTP or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility based on animal data.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Thymus. (2-Methoxyethanol) Based on available data, the classification criteria are not met.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Not classified.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential	No data available.	
	Partition coefficient n-octanol / water (log Kow)	
	2-methoxyethanol (CAS 109-86-4)	-0.77
Mobility in soil	No data available.	
Other adverse effects	None known.	

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	NA1993
UN proper shipping name	Combustible Liquid, n.o.s (Vinyltris(2-methoxyethoxy)silane)
Transport hazard class(es)	
Class	Combustible liq
Subsidiary risk	-
Packing group	III
Special precautions for user	This material is classified as a combustible liquid when shipped in bulk packaging >119 G/450 L. This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less. Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, T1, T4, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	241
IATA	
	Not regulated as dangerous goods.
IMDG	
	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are listed on or exempt from the U.S. EPA TSCA Inventory List.	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	2-methoxyethanol (CAS 109-86-4)	1.0 % One-Time Export Notification only.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.	
CERCLA Hazardous Substance List (40 CFR 302.4)	2-methoxyethanol (CAS 109-86-4)	LISTED
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No	
SARA 302 Extremely hazardous substance	Not listed.	
SARA 311/312 Hazardous chemical	Yes	

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-methoxyethanol	109-86-4	< 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

2-methoxyethanol (CAS 109-86-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

2-methoxyethanol (CAS 109-86-4)

US. New Jersey Worker and Community Right-to-Know Act

2-methoxyethanol (CAS 109-86-4)

US. Pennsylvania Worker and Community Right-to-Know Law

2-methoxyethanol (CAS 109-86-4)

US. Rhode Island RTK

2-methoxyethanol (CAS 109-86-4)

US. California Proposition 65

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

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

2-methoxyethanol (CAS 109-86-4)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	15-April-2014
Revision date	01-December-2014
Version #	02
Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 2 Flammability: 2 Physical hazard: 1
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. The information in the sheet was written based on the best knowledge and experience currently available.