SAFETY DATA SHEFT



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1. Identification

Product identifier

Andisil 187 Silane

Other means of identification

Product code

8202

Recommended use

Adhesion promoter,

Recommended restrictions

None known.

Manufacturer / Importer / Supplier / Distributor information

Company name

AB Specialty Silicones LLC

Address

3790 Sunset Ave. Waukegan, IL 60087

Telephone

General Assistance:

847-599-7765

E-mail

info@andisil.com

Contact person

Hans Haas

Emergency phone number

24 hour: CHEMTREC

800-424-9300

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Serious eye damage/eye irritation

Category 1

Environmental hazards

Not classified.

OSHA defined hazards

Not classified.

Label elements



Signal word

Hazard statement

Causes serious eve damage.

Precautionary statement

Prevention

Wear eye/face protection.

Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage

Store away from incompatible materials.

Disposal

Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of

as little as 30 mls.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Glycidoxypropyltrimethoxysilan e	2530-83-8	< 100
Methanol	67-56-1	< 0.2

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. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician if you feel unwell.

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DO NOT REMOVE

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CONTROLLED COPY VALID ONLY IF IN RED Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. 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 immediately.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed

Causes severe eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Liquid or vapors can react with moisture in the eye to form methanol, an alcohol which can cause temporary or permanent blindness depending on exposure. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.

Indication of immediate medical attention and special treatment needed

General information

This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media Foam. Dry chemical powder. Carbon dioxide (CO2).

Water.

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.

Fire-fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk,

General fire hazards

Reacts with water and moisture in air liberating methanol.

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. Do not breathe mist or vapor. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of spills, beware of slippery floors and surfaces. 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

The product is immiscible with water and will sediment in water systems.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. 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. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Use with adequate ventilation. Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Protect from moisture. Keep from freezing. Prevent contact with water or air and store in air-tight containers in vacuum or in inert atmosphere. Never leave unsealed.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Туре	Value	
Methanol (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
Methanol (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Methanol (CAS 67-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	
		200 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time	
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*	

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

Exposure guidelines

US - California OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Methanol (CAS 67-56-1)

Skin designation applies.

US - Tennesse OELs: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Methanol (CAS 67-56-1)

Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Methanol (CAS 67-56-1)

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 chemical-resistant, impervious 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.

Thermal hazards

General hygiene considerations

Wear appropriate thermal protective clothing, when necessary.

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

Clear water-white liquid.

Physical state

Liquid.

Form Andisil 187 Liquid.

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Color

Clear, water white

Odor

Ether.

Odor threshold

Not available. Not available.

Melting point/freezing point

< -94 °F (< -70 °C)

range

Initial boiling point and boiling

554 °F (290 °C) (760 mm)

Flash point

230.0 °F (110.0 °C) Pensky-Martens Closed Cup

Evaporation rate

< 1 (n-butylacetate = 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

< 1 mm Hg (20 °C) < 1.33 hPa (20 °C)

Vapor density

> 1 (25 °C / 77 °F) (Air = 1)

Relative density

1.069 (25 °C)

Solubility(ies)

Solubility (water)

Insoluble (in water).

Partition coefficient

Not available.

(n-octanol/water)

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

Not available.

Other information

Molecular weight

236.34

Percent volatile

Not determined.

VOC (Weight %)

702 g/l (Calculated)

10. Stability and reactivity

Reactivity

The product reacts with: Water, moisture.

Chemical stability

Stable under normal temperature conditions.

Possibility of hazardous

reactions

Reacts with water and moisture in air liberating methanol.

Conditions to avoid

Contact with incompatible materials. Avoid temperatures above 300 °C.

Incompatible materials

Water, moisture. Strong oxidizing agents.

Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. 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

Ingestion

Do not ingest.

Inhalation

Do not inhale this material.

Causes serious eye damage.

Skin contact Eye contact

Avoid contact with skin.

Symptoms related to the physical, chemical and toxicological characteristics Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and

blurred vision,

Liquid or vapors can react with moisture in the eye to form methanol, an alcohol which can cause temporary or permanent blindness depending on exposure. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls.

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Acute toxicity Components

Not classified.

Species

Test Results

Methanol (CAS 67-56-1)

Acute

Dermal

LD50

Rabbit

15800 ma/ka

Inhalation

LC50

Rat

87.5 mg/l, 6 Hours

Oral

LD50

Rat

5628 mg/kg

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 eve damage.

Respiratory or skin sensitization

Respiratory sensitization

Due to lack of data the classification is not possible. Due to lack of data the classification is not possible.

Skin sensitization Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity

Due to lack of data the classification is not possible. Due to lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

Specific target organ toxicity -

repeated exposure

Due to lack of data the classification is not possible.

Aspiration hazard

Due to lack of data the classification is not possible.

Chronic effects

May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity

The product components are 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.

Components

Methanol (CAS 67-56-1)

Aquatic

Crustacea

EC50

Water flea (Daphnia magna)

> 10000 mg/l, 48 hours

Test Results

LC50

Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Persistence and degradability Bioaccumulative potential

No data is available on the degradability of this product. No data available for this product.

Species

Partition coefficient n-octanol / water (log Kow)

Methanol (CAS 67-56-1)

-0.77

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. 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,

US RCRA Hazardous Waste U List: Reference

Methanol (CAS 67-56-1)

U154

Waste from residues / unused

products

Dispose of in accordance with local regulations.

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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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods,

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not available.

Annex II of MARPOL 73/78 and

the IBC Code

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)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Methanol (CAS 67-56-1)

LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Methanol (CAS 67-56-1)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

WARNING: This product contains a chemical known to the State of California to cause birth

defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Methanol (CAS 67-56-1)

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

Methanol (CAS 67-56-1)

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

Methanol (CAS 67-56-1)

US. Rhode Island RTK

Methanol (CAS 67-56-1)

US. California Proposition 65

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

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

Methanol (CAS 67-56-1)

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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

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

Issue date

03-March-2014

Revision date

Version #

01

Further information

HMIS® is a registered trade and service mark of the NPCA.

NFPA Ratings



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.

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