

I. PRODUCT AND COMPANY IDENTIFICATION

Name On Label

Andisil 186 Silane

Manufacturer

AB Specialty Silicones
3790 Sunset Avenue
Waukegan, IL 60087
Phone: 908 273-8015
Emergency Phone: 888 234-1395
800 424-9300

DISTRIBUTED BY
R. E. CARROLL, INC.
1570 NORTH OLDEN AVENUE
TRENTON, NJ 08638-3204
609-695-6211 / 800-257-9365

CHEMTREC EMERGENCY PHONE NUMBER

II. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS#	WT%	OSHA PEL (mg/m ³)	ACGIH (mg/m ³)
2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane	3388-04-3	≥ 98.0%	NE	NE

NE = Not Established STEL = Short Term Exposure Limit C = Ceiling Limits
All ingredients are on the TSCA inventory or comply with TSCA requirements

III. HAZARDS IDENTIFICATION

Appearance and Odor

Colorless Liquid

DANGER

Harmful if swallowed. May be harmful in contact with skin. Cause severe skin burns and eye damage.

POTENTIAL HEALTH EFFECTS:

- Ingestion
- Skin Contact
- Inhalation
- Eye Contact

Harmful if swallowed.

Causes skin irritation. Harmful if absorbed through the skin.

May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema.

Causes eye irritation.

IV. FIRST AID MEASURES**General Information**

Take persons to a safe place. Observe self-protection for first aid. Always seek medical advice in the event of contact with this substance.

Ingestion

If patient is fully conscious, give two glasses of water. Induce vomiting. Seek medical attention immediately.

Skin Contact

Remove contaminated clothes at once. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious cases, use emergency shower immediately. Seek medical advice immediately and clearly identify substance.

Inhalation

Move the exposed person to fresh air at once. Keep the patient calm. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice immediately and clearly identify substance.

Eye Contact

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-30 min while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as available. Do not interrupt flushing. If necessary, continue flushing during transport to emergency care facility. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.

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Notes To Physician

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-30min while holding the eyelid(s) open. If contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Neutral saline solution may be used as soon as available. Do not interrupt flushing. If necessary, continue flushing during transport to emergency care facility. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.

V. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

- **Flash Point** 112 °C
- **Auto-ignition** Not Determined
- **Flammable Limits in Air Upper (%)** Not Available
- **Flammable Limits in Air Lower (%)** Not Available

Extinguishing Media

Dry-chemical, foam, carbon dioxide

Fire Fighting Measures

Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Special Protective Equipment for Fire Fighting

Use respiratory protection independent of recirculated air.

VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Avoid inhaling mists or vapours. If material is released indicate risk of slipping.

Environmental Precautions

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material. Retain contaminated water/extinguishing water.

Methods For Cleaning Up

Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner.

Other Information

Eliminate all sources of ignition.

WARNING

Where material spills may be slippery

VII. HANDLING AND STORAGE

Handling

- **Precautions For Safe Handling**
- **Precautions Against Fire And Explosion**

Ensure adequate ventilation. Keep away from incompatible substances, such as moisture. Spilled substance increases risk of slipping

Product can separate methanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and unclean containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

Storage

- **Conditions For Storage Rooms And Vessels** Make sure there is no possibility of entering the ground.
- **Advice For Storage Of Incompatible Materials** Not applicable
- **Further Information For Storage** Protect against moisture. Store in original container only. Keep container tightly closed and store in a cool, well ventilated place.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION**Respiratory Protection**

If used under normal operating conditions and with adequate ventilation, respiratory protection is not required

Ventilation

Local exhaust: Normal air flow

SPECIAL/MECHANICAL/OTHER: *Not applicable*

Protective Gloves

Protective gloves made of butyl rubber. Gloves suitable for up to 60 minutes use.

Eye Protection

Tight fitting protective goggles.

Skin Protection

Protective clothing.

Other Protective Clothing or Equipment

Rubber apron; Facility needs to be equipped with an eye-wash fountain and safety shower that is easily accessible; Eye bath
Safety shower

Exposure To The Environment Limited And Controlled

Prevent material from entering surface waters and soil.
Note: When heated to temperatures above 150°C (300°F) in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate eyes, nose, and throat. Safe handling conditions may be maintained by keeping vapor conditions within the OSHA permissible exposure limit for formaldehyde. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

IX. PHYSICAL AND CHEMICAL PROPERTIES**Vapor Pressure (20 °C) (mm Hg)**

no data available

Vapor Density (AIR = 1)

no data available

pH

6

Melting Point

< -70 °C

Boiling Point

310 °C at 760mmHg

Physical State

Colorless to transparent liquid

Density/Relative Density

1.07g/cm³ at 25 °C

Molecular Weight

246.38

Solubility in Water

Reacts with water

X. STABILITY AND REACTIVITY**Stability**

Stable

General Information

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Hazardous Thermal Decomposition/Combustion Products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, silicon oxides.

Incompatibility (Materials to avoid)

Strong oxidizing agents, Amines, Bases.

Conditions to Avoid

Moisture.

XI. TOXICOLOGICAL INFORMATION

Route of Exposure Inhalation, skin contact and accidental ingestion.

Signs and Symptoms of Overexposure May cause an allergic skin reaction.

Acute Toxicity

Chemical Name	CAS No.	LD50 (Oral)	LD50 (Dermal)	LC50 (Inhalation)
2-(3,4-Epoxy cyclohexyl) ethyltrimethoxysilane	3388-04-3	8,528mg/kg	6,716 mg/kg	--

- **Inhalation** No data available
- **Ingestion** No data available
- **Skin** No data available
- **Eyes** No data available

Chronic Toxicity

- **Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.
- **Ingestion** May be harmful if swallowed.
- **Skin** May be harmful if absorbed through skin. Causes skin irritation.
- **Eyes** Causes eye irritation.

Other Health Hazard Information No data available.

XII. ECOLOGICAL INFORMATION

Aquatic and Terrestrial Ecotoxicity No data available

Persistence and Degradability Water No data available

Bioaccumulative Potential Bioaccumulation No bioaccumulation potential

Mobility in Soil No data available

Additional Environmental Information No specific information

XIII. DISPOSAL CONSIDERATIONS

Material Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

Unclean Packaging Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

XIV. TRANSPORT INFORMATION

DOT Classification This product is not regulated by DOT

IMDG Classification This product is not regulated by IMDG

ICAO Classification This product is not regulated by ICAO

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XV. REGULATORY INFORMATION**U.S. Federal Regulations**

National and local regulations must be observed. For information on labelling please refer to section 2 of this document.

Other International Regulations

Listed on or in accordance with the following inventories

- IECSC
- PICCS
- ECL
- AICS
- DSL
- TSCA
- ENCS

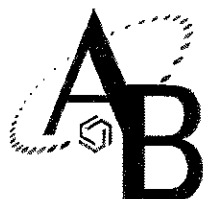
China
Philippines
Korea
Australia
Canada
USA
Japan

XVI. OTHER INFORMATION**Other Information****NFPA Profile**

Health - 2
Flammability - 1
Reactivity - 1

Disclaimer

The data provided in this MSDS is offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. Before using, user shall determine the suitability of the product for his intended use.



Data Approved by: TRH
Date: June-2013

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