



SAFETY DATA SHEET

1. Identification

Product identifier	Andisil® MT 9010	
Other means of identification		
SDS number	Andisil® MT 9010	
Product code	8170	
Recommended use	Crosslinker for adhesives/sealants/coatings	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	AB Specialty Silicones LLC	
Address	3725 Hawthorn Court Waukegan, IL 60087 US	
Telephone	General Assistance:	847-599-7765
E-mail	info@andisil.com	
Contact person	Health & Safety Manager	
Emergency phone number	24 hour: ChemTel	800-255-3924

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1B
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure (oral)	Category 2 (Blood)
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Combustible liquid. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs (Blood) through prolonged or repeated exposure by ingestion.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces-No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Specific treatment (see this label). In case of fire: Use appropriate media to extinguish.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Butan-2-one O,O',O''-(methylsilyldiyl)trioxi me	22984-54-9	< 90
Butan-2-one O,O',O'',O'''-silaneterayltetraoxi me	34206-40-1	< 15

Byproducts

Chemical name	CAS number	%
Butanoneoxime	96-29-7	<= 2

Impurities

Chemical name	CAS number	%
2,2-Bis(2-butanoneoximino)butane	N/A	< 1

Butanoneoxime and 2,2-Bis(2-butanoneoximino)butane are formed by reaction of this silane with water.

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	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
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 and persists.
Ingestion	Rinse mouth.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire. Water.
Specific hazards arising from the chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. Thermal decomposition or combustion may liberate toxic gases or fumes. Dense black smoke. Carbon oxides. Silicon oxides. Nitrogen Oxides (NO _x).
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. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible liquid.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Ensure adequate ventilation. Do not breathe mist or vapor. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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.

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.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Provide adequate ventilation. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Should be handled in closed systems, if possible.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from moisture. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers. Store locked up. Store in cool place.

8. Exposure controls/personal protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Byproducts	Type	Value
Butanoneoxime (CAS 96-29-7)	TWA	36 mg/m3
		10 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. When using do not 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Clear to yellow.
Odor	Slight ether odor.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not determined.
Initial boiling point and boiling range	> 572 °F (> 300 °C)
Flash point	> 150.8 °F (> 66.0 °C) Pensky-Martens Closed Cup
Evaporation rate	< 1 (n-butyl acetate = 1)
Flammability (solid, gas)	Not applicable.

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	< 0.1 mbar (68 °F)
Vapor density	> 1 (Air=1) (25 °C) 8.09 - 8.26 lbs/gallon (68 °F)
Relative density	0.97 - 0.99 g/cm ³ (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	5 - 15 cSt (25°C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	Not determined.

10. Stability and reactivity

Reactivity	Reacts with water. Hydrolyses.
Chemical stability	Material is stable under normal 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.
Incompatible materials	Acids. Alcohols.
Hazardous decomposition products	May produce Methyl ethyl ketoxime (MEKO) upon hydrolysis. Silicon oxides. Methyl ethyl ketone (MEK). Nitrogen oxides. Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.

Eye contact	Causes serious eye irritation.	
Ingestion	May be harmful if swallowed. May cause damage to organs through prolonged or repeated exposure by ingestion.	
Symptoms related to the physical, chemical and toxicological characteristics	May cause an allergic skin reaction. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Dermatitis. Rash.	
Information on toxicological effects		
Acute toxicity	May be harmful if swallowed. May be harmful in contact with skin.	
Components	Species	Test Results
Butan-2-one O,O',O''-(methylsilylidyne)trioxime (CAS 22984-54-9)		
NOAEL	Rat	10 mg/kg
Acute		
<i>Oral</i>		
LD50		2463 mg/kg
Butan-2-one O,O',O'',O'''-silaneterayltetraoxime (CAS 34206-40-1)		
Acute		
<i>Dermal</i>		
LD	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	2453 mg/kg
Byproducts	Species	Test Results
Butanoneoxime (CAS 96-29-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 1000 mg/kg, 24 Hours
<i>Oral</i>		
LD50	Rat	> 900 mg/kg
* Estimates for product may be based on additional component data not shown.		
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer. Reacts with water and moisture in the air liberating 2-butanone oxime under normal conditions of use.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
NTP Report on Carcinogens		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not regulated.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - repeated exposure	May cause damage to organs (Blood) through prolonged or repeated exposure by ingestion.	
Aspiration hazard	Not an aspiration hazard.	

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.
Mobility in soil	The product is insoluble in water.
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	Dispose of contents/container in accordance with local/regional/national/international regulations. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
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. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	
UN number	NA1993
UN proper shipping name	Combustible Liquid, n.o.s (Butan-2-one O,O',O''-(methylsilyldiylidene)trioxime)
Transport hazard class(es)	
Class	Combustible Liquid
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.
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.
General information	Read safety instructions, SDS and emergency procedures before handling.

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.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not 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)

Not regulated.

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

Not regulated.

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**

Not regulated.

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

Not listed.

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

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

This product contains the following chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm:
None known.

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 04-February-2016
Revision date -
Version # 01
Further information HMIS Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

HMIS® ratings

Health: 2*
Flammability: 2
Physical hazard: 1

List of abbreviations

LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
EC50: Effective Concentration, 50%.
TWA: Time weighted average.
PEL: Permissible Exposure Limit.
TLV: Threshold Limit Value.
OEL: Occupational Exposure Limit.
STEL: Short term exposure limit.
IARC: International Agency for Research on Cancer.
NTP: National Toxicology Program.
DOT: Department of Transportation.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
MARPOL: International Convention for the Prevention of Pollution from Ships.
OSHA: Occupational Safety and Health Administration.
ACGIH: American Conference of Industrial Hygienists.
HMIS: Hazardous Materials Identification System.

Disclaimer

AB Specialty Silicones LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.