



MATERIAL SAFETY DATA SHEET

BONDAFLEX SIL 2300 PRIMER

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

PRODUCT NAME: BONDAFLEX SIL 2300 PRIMER
PRODUCT CODE: 2300
ADDRESS: May National Associates, Inc.
995 Towbin Avenue
Lakewood, New Jersey 08701
PHONE: (800) 691-0234
FAX: (973) 473-4222
EMERGENCY PHONE: (CHEMTREC) (800) 424-9300
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PREPARED BY: Bruce Lakatosh
REVISION DATE: 3/11/08 SUPERCEDES: 8/23/04

Generic Description: MIXTURE OF INORGANIC AND ORGANIC COMPOUNDS
Physical Form: LIQUID
Color: COLORLESS TO PALE YELLOW
Odor: SLIGHT ODOR

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

SECTION 2 – OSHA HAZARDOUS COMPONENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
107-51-7	> 60.0	Octamethyltrisiloxane
682-01-9	5.0 - 10.0	Tetrapropyl orthosilicate
18407-95-9	5.0 - 10.0	1-Methoxyisopropyl orthosilicate
5593-70-4	5.0 - 10.0	Tetrabutyl titanate
71-36-3	<1.0	n-Butyl alcohol

The above components are hazardous as defined in 29 CFR 1910.1200.

SECTION 3 – EFFECTS OF OVEREXPOSURE

Acute Effects

Eye: Direct contact may cause severe irritation.

Skin: May cause moderate irritation.

Inhalation: Harmful if inhaled. Overexposure may cause serious illness. Vapor and/or mist irritating to the respiratory tract. Vapor overexposure may cause drowsiness.

Oral: No significant effects expected from a single short-term exposure. Swallowing large amounts may cause drowsiness.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged exposure may irritate seriously.

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Inhalation: No known applicable information.

Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

SECTION 4 – FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes. Get medical attention.

Skin: Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.

Inhalation: Remove to fresh air. Get immediate medical attention.

Oral: Get medical attention.

Comments: Treat according to person's condition and specifics of exposure.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point: 87.4 °F / 30.8 °C (Pensky-Martens Closed Cup)

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: On large fires use medium expansion (>30:1) AFFF alcohol compatible foam or water spray. On small fires use medium expansion (>30:1) AFFF alcohol compatible foam, CO2 or water spray. Water can be used to cool fire exposed containers.

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.

Unusual Fire Hazards: Vapors are heavier than air and may travel to a source of ignition and flash back. Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Fire burns more vigorously than would be expected.

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Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Metal oxides.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills.

SECTION 7 – HANDLING AND STORAGE

Use with adequate ventilation. Product evolves n-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-butyl alcohol within exposure guidelines or use respiratory protection. Product evolves propylene glycol monomethyl ether when exposed to water or humid air. Provide ventilation during use to control propylene glycol monomethyl ether within exposure guidelines or use respiratory protection. Product evolves n-propyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-propyl alcohol within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Do not breathe vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and away from heat, sparks, and flame. Keep container closed and store away from water or moisture.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
107-51-7	Octamethyltrisiloxane	TWA 200 ppm.
5593-70-4	Tetrabutyl titanate	See n-butyl alcohol comments.
18407-95-9	1-Methoxyisopropyl orthosilicate	See propylene glycol monomethyl ether comments.
682-01-9	Tetrapropyl orthosilicate	See n-propyl alcohol comments.

Propylene glycol monomethyl ether is formed on contact with water or humid air. Provide adequate ventilation to

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control exposures within guidelines of OSHA PEL (final rule) and ACGIH TLV: TWA 100 ppm and STEL 150 ppm. n-Propyl alcohol is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL (final rule): TWA 200 ppm, STEL 250 ppm. ACGIH TLV: TWA 200 ppm, STEL 400 ppm. n-Butyl alcohol is formed on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL (final rule): TWA 100 ppm and ACGIH TLV: 20 ppm.

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use chemical worker's goggles.

Skin: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

Suitable Gloves: Nitrile Rubber. Neoprene Rubber(R). Butyl Rubber.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial Hygiene Personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary Measures: Avoid eye contact. Avoid skin contact. Do not breathe vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.

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Comments: Product evolves n-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-butyl alcohol within exposure guidelines or use respiratory protection. Product evolves propylene glycol monomethyl ether when exposed to water or humid air. Provide ventilation during use to control propylene glycol monomethyl ether within exposure guidelines or use respiratory protection. Product evolves n-propyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-propyl alcohol within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Liquid
Color:	Colorless to pale yellow
Odor:	Slight odor
Specific Gravity @ 25 °C:	0.820
Viscosity:	1 cSt
Freezing/Melting Point:	Not determined.
Boiling Point:	> 150 °C
Vapor Pressure @ 25 °C:	Not determined.
Vapor Density:	Not determined.
Solubility in Water:	Not determined.
pH:	Not determined.
Volatile Content:	Not determined.

Note: The above information is not intended for use in preparing product specifications.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Hazardous Polymerization:	Hazardous polymerization will not occur.
Conditions to Avoid:	None.
Materials to Avoid:	Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

SECTION 11 – TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

SECTION 12 – ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

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Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above.
Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes

Characteristic Waste: Ignitable: D001

State or local laws may impose additional regulatory requirements regarding disposal.

SECTION 14 – TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.
 Hazard Technical Name: OCTAMETHYLTRISILOXANE/TETRABUTYL TITANATE
 Hazard Class: 3
 UN/NA Number: UN1993
 Packing Group: III
 Hazard Label(s): FLAMMABLE LIQUID LABEL



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Ocean Shipment (IMDG)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.
Hazard Technical Name: OCTAMETHYLTRISILOXANE/TETRABUTYL TITANATE
Hazard Class: 3
UN Number: 1993
Packing Group: III
Hazard Label(s): FLAMMABLE LIQUID
Marine Pollutant: Not Applicable

Air Shipment (IATA)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.
Hazard Technical Name: OCTAMETHYLTRISILOXANE/TETRABUTYL TITANATE
Hazard Class: 3
UN Number: 1993
Packing Group: III
Hazard Label(s): FLAMMABLE LIQUID

SECTION 15 – REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances:

None.

Section 304 CERCLA Hazardous Substances:

None.

Section 312 Hazard Class:

Acute: Yes
Chronic: No
Fire: Yes
Pressure: No
Reactive: No



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Section 313 Toxic Chemicals:

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

No ingredient regulated by MA Right-to-Know Law present.

New Jersey

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18407-95-9	5.0 - 10.0	1-Methoxyisopropyl orthosilicate
682-01-9	5.0 - 10.0	Tetrapropyl orthosilicate

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
107-51-7	> 60.0	Octamethyltrisiloxane
5593-70-4	5.0 - 10.0	Tetrabutyl titanate
18407-95-9	5.0 - 10.0	1-Methoxyisopropyl orthosilicate
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SECTION 16 – OTHER INFORMATION

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate