



MATERIAL SAFETY DATA SHEET

BONDAFLEX SIL 290 FPS-NB SILICONE SEALANT

1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BONDAFLEX SIL 290 FPS-NB Silicone Sealant, Tint base
PRODUCT CODE: Sil 290 FPS-NB
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
International (CHEMTREC) (703) 527-3887
REVISION DATE: 12/03/08 SUPERSEDES: 10/03/08

2 – COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

This product consists of a mixture/preparation.

CAS Number	Ingredient	Wt. %
96-29-7	Methyl ethyl ketoxime (MEKO)	1-5
Trade Secret	Oximino Silane	2-7

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

3 – HAZARDS IDENTIFICATION

MAIN SYMPTOMS:

EYE: Direct contact may cause mild irritation. Eye contact may cause conjunctivitis, corneal damage, or severe chemical burns.
SKIN: May cause moderate irritation and possible dermal sensitization. May be absorbed through the skin.
INHALATION: Irritates respiratory passages very slightly. Vapor overexposure may cause drowsiness.
ORAL: Small amounts transferred to the mouth by fingers during use, etc. should not injure. Swallowing may injure.

COMMENTS

If heated to temperatures above 150°C in the presence of air, silicones can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin, and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA permissible exposure limit for formaldehyde.

Product evolves Methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide adequate ventilation to control MEKO within exposure guidelines or use respiratory protection – TWA: 3ppm, STEL: 10ppm; AIHA WEEL TWA: 10ppm.

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within OSHA PEL guidelines – OSHA PEL: TWA 200ppm and ACGIH TLV-skin: TWA 200ppm, STEL 250ppm.

NFPA HAZARD CODES: Health: 1 Flammability: 1 Reactivity: 0

4 – FIRST-AID PROCEDURES

INHALATION: Remove to fresh air. If ill effects persist, get medical attention.
SKIN CONTACT: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation develops or ill effects persist.
EYE CONTACT: Immediately flush with water for 15 minutes. Get medical attention.
INGESTION: Get medical attention.
COMMENTS: Treat according to person's condition and specifics of exposure.



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5 – FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: On large fires, use dry chemical, foam or water spray. On small fires, use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

FIRE-FIGHTING PROCEDURES: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

FLASH POINT (CLOSED CUP): Greater than 212F (100C)

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: metal oxides, silicone dioxide, carbon oxides and traces of incompletely burned carbon compounds, nitrogen oxides and formaldehyde.

6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Observe all personal protective equipment recommendations described in Sections 5 and 8.

ENVIRONMENTAL PRECAUTIONS: Disposal of collected product, residues, and cleanup materials may be governmentally regulated. Observe all applicable local, state and Federal waste management regulations.

METHODS FOR CLEANING UP: Wipe up or scrape up and contain for salvage or disposal. Final cleaning may require use of steam, solvents, or detergents. See applicable regulatory compliance information in Section 15.

7 – HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Product evolves Methyl ethyl ketoxime (MEKO) and methanol when exposed to water or humid air. Provide adequate ventilation to control MEKO within exposure guidelines as described in Section 3.

STORAGE: Keep container closed and store away from water or moisture or oxidizing materials.

8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

ENGINEERING CONTROLS:

LOCAL EXHAUST: Recommended

GENERAL VENTILATION: Recommended

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Avoid eye contact. Use proper protection, safety glasses as a minimum.

SKIN AND BODY PROTECTION: Wash at mealtimes and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush effected areas with cool water. Chemical protective gloves are recommended.

RESPIRATORY PROTECTION: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines

HYGIENE MEASURES (INGESTION): Wash hands after handling and before eating. Do not eat, drink, or smoke when handling product.

Precautionary measures: Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

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



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9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Solid (Paste)
COLOR: Translucent
ODOR: Oxime
FLASHPOINT: >212F (100C)
EXPLOSION PROPERTIES: Not Determined
VAPOR PRESSURE (AT 100 °F): Not Applicable
VAPOR DENSITY: Not Applicable
DENSITY: 9.5 lbs/gal
SOLUBILITY IN WATER (%): Less than 0.1
SPECIFIC GRAVITY (AT 77 °F/25 °C): 1.14
% VOLATILE BY VOLUME: Less than 3%
VOLATILE ORGANIC CONTENT (VOC): 2.58% by weight; 29 g/L (0.25 lbs/gal)
NOTE: The above information is not intended for use in preparing product specifications.

10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.
CONDITIONS TO AVOID: Store away from water or moisture.
MATERIALS TO AVOID: Oxidizing material can cause a reaction.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products as described in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY:
SKIN: Product contains oximes, possible skin sensitizers. Product also contains small quantities of methanol, which is a tissue irritant that may be absorbed through the skin and produce systemic toxic effects.
INHALATION: Vapor overexposure may cause drowsiness, injure blood, liver and may irritate eyes, nose and throat.
ORAL: Small amounts transferred to the mouth by fingers during use, etc., should not injure. Swallowing large amounts may injure slightly.
Note that chronic exposure to methanol (skin, inhalation, or oral) may damage the central nervous system, optic nerve, kidneys, and liver, impair vision, and cause respiratory failure.
SPECIFIC EFFECTS: Methanol overexposure may cause reproductive effects.

SECTION 12 – ECOLOGICAL INFORMATION

Complete information is not yet available.

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 data becomes available. Please read the other information presented in the section concerning the overall ecological safety of this material.

SECTION 13 – DISPOSAL INFORMATION

PRODUCT DISPOSAL: RCRA Hazard Class (40 CFR 261)
When a decision is made to discard this material, as received, is it classified as a hazardous waste? NO.

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



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SECTION 14 – TRANSPORT INFORMATION

DOT Information (49CFR 172.101)

PROPER SHIPPING NAME: Not Applicable
HAZARD CLASS: Not Applicable
UN / NA NUMBER: None
PACKING GROUP: Not Applicable

SECTION 15 – REGULATORY INFORMATION

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

US FEDERAL REGULATIONS:

TSCA Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

EPA SARA Title III Chemical Listings:

Section 302 Extremely Hazardous Substances / Section 304 CERCLA Hazardous Substances: None

Section 312 Hazard Class:

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

Section 313

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

No chemicals found in this product exceed their individual weight percent thresholds applicable to SARA Section 313 and therefore no chemical in this product is subject to Section 313 reporting.

US STATE REGULATIONS:

This product does comply with the California Air Resources Board maximum for VOC's in a sealant.

States within the US that have promulgated State Right-to-Know regulations with chemical listing requirements including the chemicals in this product are provided below.

<i>Chemical</i>	<i>Wt. %</i>	<i>CAS No.</i>	<i>States</i>
Dimethyl siloxane	>60	70131-67-8	New Jersey, New York, Massachusetts, Pennsylvania
Calcium Carbonate	10-30	1317-65-3	Minnesota
Silica, amorphous	3-10	7631-86-9	Massachusetts, Pennsylvania
Oximino silane	2-7	Trade Secret	New Jersey, Pennsylvania
Methyl ethyl ketoxime	1-5	96-29-7	Minnesota, New Jersey



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BONDAFLEX SIL 290 FPS-NB SILICONE SEALANT

INTERNATIONAL:

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Canadian DSL

All ingredients in this product are currently listed on the Canadian Domestic Substances List (DSL), except for a non-hazardous silane (1-5%) which is on the Canadian Schedule III Notification inventory. (Based upon the concentration of the silane in the formulation, it would require 619,000 10.1 fl.oz. cartridges of Sil 290 to reach the 10,000 kg yearly limit before reporting is required. This is equal to approximately 329 153-Gal batches of Sil 290. There is also a cumulative limit of 50,000 kg that can take many years to reach, assuming no one year exceeds the 10,000 kg limit.) The substances that are on the DSL would not be considered new for the purposes of the Canadian Environmental Protection Act (CEPA).

Note:

The recipient of this product should be aware of the possible existence of additional local regulations, which may be applicable to this product.

SECTION 16 – OTHER INFORMATION

These data are offered in good faith as typical values and not as a product specification. 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.



MATERIAL SAFETY DATA SHEET

BONDAFLEX SIL 290 / SIL 295 FPS-NB SILICONE SEALANT, Ucolor SIL Pak

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BONDAFLEX SIL 290 / SIL 295 FPS-NB Silicone Sealant, Ucolor SIL Pak
PRODUCT CODE: SIL 290 FPS-NB
SIL 295 FPS-NB
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
International (CHEMTREC) (703) 527-3887
REVISION DATE: 10/1/08 SUPERSEDES: NEW

SECTION 2 – COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

This product consists of a mixture/preparation. Due to its final form, the ingredients in this product are not considered hazardous per the OSHA Hazard Communication Standard. Under normal conditions of use, no respirable particles are released from this product.

SECTION 3 – HAZARDS IDENTIFICATION

MAIN SYMPTOMS:

EYE: Direct contact causes slight eye irritation.
SKIN: Exposure may irritate mildly.
INHALATION: Overexposure may cause respiratory tract irritation.
ORAL: Swallowing may cause digestive discomfort and gastrointestinal irritation.
NFPA HAZARD CODES: Health: 1 Flammability: 1 Reactivity: 0

SECTION 4 – FIRST-AID PROCEDURES

INHALATION: Remove to fresh air. If ill effects persist get medical attention.
SKIN CONTACT: 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.
EYE CONTACT: Immediately flush with water for 15 minutes. Get medical attention.
INGESTION: Get medical attention.
COMMENTS: Treat according to person's condition and specifics of exposure.

SECTION 5 – FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Compatible with all usual extinguishing media
FIRE FIGHTING PROCEDURES: Wear full protective clothing, positive pressure or pressure demand breathing apparatus and protective covering for exposed areas of the head. If large amount is involved, evacuate area.
FLASH POINT (SETAFLASH): Greater than 100 °C (212 °F)
HAZARDOUS DECOMPOSITION PRODUCTS: By high heat and fire: oxides of carbon.



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SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Observe all personal protective equipment recommendations described in Sections 5 and 8.
ENVIRONMENTAL PRECAUTIONS: Disposal of collected product, residues, and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations.
METHODS FOR CLEANING UP: Ventilate area. Extinguish all ignition sources. Contain spill. Evacuate unprotected personnel from hazard area. Cover with absorbent, place in approved drum; do not seal drum for 48 hours to avoid possible pressure build-up. Local, state, and federal reporting requirements may apply to spills or releases of this material into the environment. See applicable regulatory compliance information in Section 15.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Assure good ventilation
STORAGE: Eliminate sources of ignition. Store in original sealed containers away from heat and moisture.

SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

ENGINEERING CONTROLS:
LOCAL EXHAUST: Recommended
GENERAL VENTILATION: Recommended

PERSONAL PROTECTIVE EQUIPMENT:
EYE PROTECTION: Avoid eye contact. Use proper protection - safety glasses recommended.
SKIN AND BODY PROTECTION: Avoid skin contact. Protect hands with impervious rubber gloves and wear typical full cover clothing.
RESPIRATORY PROTECTION: Wear appropriate, properly fitted NIOSH/MSHA approved respirator while the product is mixed and when the airborne contaminant levels exceed the exposure limits in poorly ventilated areas. Follow respirator manufacturer's directions for respirator use.
HYGIENE MEASURES (INGESTION): Wash hands after handling and before eating.
PRECAUTIONARY MEASURES: Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

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

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Solid (Paste)
ODOR: Slight odor
VAPOR PRESSURE (AT 100 °F): Not applicable
DENSITY: NA
SOLUBILITY IN WATER (%): NIL
SPECIFIC GRAVITY (AT 77 °F/25 °C): NA
% VOLATILE BY VOLUME: Less than 0.1%
VOLATILE ORGANIC CONTENT (VOC): NA
FLASH POINT (SETAFLASH): Greater than 100 °C (212 °F)
NOTE: The above information is not intended for use in preparing product specifications.

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. No hazardous reactions when stored and handled according to prescribed instructions.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products as described in Section 5.



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SECTION 11 – TOXICOLOGICAL INFORMATION

None known.

CHRONIC EXPOSURE:

SKIN: Exposure may irritate mildly.

INHALATION: Overexposure may cause respiratory tract irritation.

ORAL: Swallowing may have adverse effects depending on quantity ingested.

SECTION 12 – ECOLOGICAL INFORMATION

No data available.

SECTION 13 – DISPOSAL INFORMATION

PRODUCT DISPOSAL: RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No
State or local laws may impose additional regulatory requirements regarding disposal.

SECTION 14 – TRANSPORT INFORMATION

DOT Information (49CFR 172.101)

PROPER SHIPPING NAME:	Not Applicable
HAZARD CLASS:	Not Applicable
UN / NA NUMBER:	None
PACKING GROUP:	Not Applicable

SECTION 15 – REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR1910.1200.

US FEDERAL REGULATIONS:

CERCLA/SARA – Hazardous Substances and their Reportable Quantities
None

Based on an evaluation of the components used, this product does contain hazardous ingredients identified as per 29 CFR 1910.1200.

TOXIC SUBSTANCE CONTROL ACT (TSCA):

TSCA Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES

None

SARA 311/312 HAZARD CATEGORIES:

Immediate:	No
Delayed:	No
Fire:	No
Pressure:	No
Reactive:	No



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BONDAFLEX SIL 290 / SIL 295 FPS-NB SILICONE SEALANT, Ucolor SIL Pak

Section 313

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

None

STATE REGULATIONS:

This product does comply with the California Air Resources Board maximum for VOC's in a sealant.

Per the California Air Resources Board TITLE 17 Division 3 Chapter 1 Subchapter 8.5 Article 2 §94508, a VOC is a substance with a vapor pressure greater than or equal to 0.1 mmHg at 20°C (68°F), or is a chemical compound with less than or equal to 12 carbon atoms if the vapor pressure is not known, or is a chemical compound with a boiling point less than or equal to 216°C (421°F).

STATE RIGHT-TO-KNOW REGULATIONS:

States within the US that have promulgated State Right-to-Know regulations with chemical listing requirements including the chemicals in this product are provided below.

Chemical	CAS No.	Wt%	States
Dimethyl siloxane	70131-67-8	>50	New Jersey, New York, Pennsylvania
Carbon Black	1333-86-4	0 – 40	New Jersey, Pennsylvania
Iron Oxide	1309-37-1	0 – 40	New Jersey, Massachusetts, Pennsylvania
Titanium Dioxide	13463-67-7	0 – 40	New Jersey, Massachusetts, Pennsylvania
Aluminum	7429-90-5	0 – 40	New Jersey, Massachusetts, Pennsylvania
CI Pigment Blue	57455-37-5	0 – 40	New Jersey, Pennsylvania
Yellow Iron Oxide	51274-00-1	0 – 40	New Jersey, Pennsylvania

INTERNATIONAL:

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Canadian DSL

All ingredients in this product are currently listed on the Canadian Domestic Substances List (DSL). The substances that are on the DSL would not be considered new for the purposes of the Canadian Environmental Protection Act (CEPA).

Note:

The recipient of this product should be aware of the possible existence of additional local regulations, which may be applicable to this product.

SECTION 16 – OTHER INFORMATION

These data are offered in good faith as typical values and not as a product specification. 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.