

MATERIAL SAFETY DATA SHEET

**PS-1 PERIMETER SEAL
(ALUMINUM)**

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Silco Incorporated
7561 Tyler Blvd.
Unit # 6
Mentor, Oh 44060

Phone: (440)-975-8886
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Revision Date: 10/01/06

General Description: Silicone elastomer
Physical Form: Paste
Color: Aluminum
Odor: Some odor

NFPA PROFILE: Health - 2 Flammability - 1 Instability/Reactivity - 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

CAS Number	Wt %	Component Name
22984-54-9	3.0 – 7.0	Methyl tri(ethylmethylketoxime) silane
83817-72-5	1.0 – 5.0	Di (ethylmethylketoxime) methoxymethyl silane

3. EFFECTS OF OVEREXPOSURE

Accute Effects:

Eye: Direct contact may cause mild irritation.
Skin: May cause moderate irritation
Inhalation: Irritates respiratory passages very slightly.
Vapor overexposure may cause drowsiness.
Oral: Low ingestion hazard in normal use.

Prolonged / Repeated Exposure Effects

Skin: Repeated skin contact may cause allergic skin reaction.
Inhalation: Overexposure by inhalation may injure the following organs: Blood, liver
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.

4. FIRST AID MEASURES

Eye:	Immediately flush with water for 15 minutes.
Skin:	Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or other ill effects develop or persist.
Inhalation:	Remove to fresh air. Get medical attention if ill effects persist.
Oral:	Get medical attention.
Comments:	Treat according to persons condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable
Autoignition Temperature:	Not determined
Flammability Limits in Air:	Not determined
Extinguishing Media:	On large scale fires use dry chemical, foam, or water spray. On small fires use carbon dioxide (CO ₂), dry chemical 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.
Usual Fire Hazards:	None.

Hazardous Decomposition Products

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

6. ACCIDENTAL RELEASE MEASURES

Containment / Clean up: Observe all personal protection equipment recommendations described in section 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent 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. Section 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call Silco Incorporated at (440)-975-8886, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self contained breathing apparatus. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take interally.

Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

CAS Number	Component Name	Exposure Limits
22984-54-9	Methyl tri(ethylmethylketoxime) silane	See ethyl methyl ketoxime comments.
83817-72-5	Di (ethylmethylketoxime) methoxymethyl silane	See methyl alcohol and ethyl methyl ketoxime comments.

Methyl alcohol forms upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm. Ethyl methyl ketoxime is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within the following exposure guidelines. Vendor guide TWA: 3 ppm, STEL: 10 PPM, AIHA WEEL TWA: 10 ppm.

Engineering Controls

Local Ventilation: Recommended
General Ventilation: Recommended

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection – safety glasses as a minimum
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 water. Chemical protective gloves are recommended.
Suitable Gloves: Butyl Rubber, Natural Rubber, Neoprene Rubber, Nitrile Rubber, Silver Shield (R), 4H(R).
Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or air sampling data show exposures are within recommended exposure guidelines. Industrial hygiene 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 concentration 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:	Respiratory protection recommended. Follow OSHA Respirator Regulations (29CFR 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.
Comments:	Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self contained breathing apparatus.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Paste
Color:	Aluminum
Odor:	Some odor
Specific Gravity @ 25 C:	1.04
Viscosity:	Not determined
Freezing / Melting Point:	Not determined
Boiling Point:	Not determined
Vapor Pressure @ 25C:	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. Contact Silco before writing specifications.

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information.

Methyl ethyl metoxime (MEKO) is formed upon contact with water or humid air. Male rodents exposed to MEKO vapor throughout their lifetime developed liver cancer. Additional testing is planned by the MEKO supplier to determine any relevance to humans. Until more data is known, exposure levels should be maintained as low as achievable.

Special Hazard Information on Components.

Sensitizers

CAS Number	Wt%	Component Name
22984-54-9	3.0 - 7.0	Methyl tri(ethylmethylketoxime) silane - possible skin sensitizer
83817-72-5	1.0 - 5.0	Di(ethylmethylketoxime) methoxymethyl silane - possible skin sensitizer

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

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 EC 50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<= 100	> 100 and < 2000	>2000

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.

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? No

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

Call Silco Incorporated at (440)-975-8886, if additional information is required.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT

Ocean shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

Call Silco at (440)-975-8886, if additional information is required.

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:	Yes
Fire:	No
Pressure:	No
Reactive:	No

Section 313 Toxic Chemicals: None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: this product contains the following chemicals 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

CAS Number	Wt %	Component Name
7631-86-9	7.0 – 13.0	Silica, amorphous

New Jersey

CAS Number	Wt%	Component Name
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy terminated
7631-86-9	7.0 – 13.0	Silica, amorphous
22984-54-9	3.0 - 7.0	Methyl tri(ethylmethylketoxime) silane
83817-72-5	1.0 - 5.0	Di(ethylmethylketoxime) methoxymethyl silane

Pennsylvania

CAS Number	Wt%	Component Name
70131-67-8	> 60.0	Dimehtyl siloxane, hydroxy-terminated
7631-86-9	7.0 – 13.0	Silica, Amorphous
22984-54-9	3.0 - 7.0	Methyl tri(ethylmethylketoxime) silane

16. OTHER INFORMATION

Prepared By: Silco Incorporated

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

**** END OF MSDS ****