



CYCLO[®] INDUSTRIES, LLC

MATERIAL SAFETY DATA SHEET

This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this product. Please read the information on these sheets and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL, STATE and COMMUNITY RIGHT TO KNOW regulations. Also, make this information available to any employee who requests it.

If Cyclo Industries, LLC considers the formula of this product to be a trade secret, the exact chemical names of the ingredient(s) and the percentages in which they are combined will not appear in the body of this sheet. The exact composition is available upon request to physicians, industrial hygienists and other health professionals.

SECTION 1 – PRODUCT & COMPANY IDENTIFICATION

Product Name: Cyclo[®] MaxPro[™] Grey⁰Ox[™] Silicone RTV Gasket Maker, Stock Nos. C-959 & C-999
 Cyclo[®] MaxPro[™] Black⁰Ox[™] Silicone RTV Gasket Maker, Stock No. C-961

Product Use: Gasket replacement or coating gaskets for valve covers, water pumps, thermostat housings, etc.

Manufactured by: Cyclo Industries, LLC
 10190 Riverside Drive, Palm Beach Gardens, Florida 33410-4881
 Telephone: (561) 775-9600

First Aid Emergency: (800) 752-7869 or (312) 906-6194

Shipping Emergency: (800) 424-9300 or (703) 527-3887 (CHEMTREC)

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS Reg. No.	Material	Percentage	Exposure Limits
22984-54-9	Methy tris (methylethylketoxime) silane	0 – 10	See methylethylketoxime comments
2224-33-1	Vinyl tris (methylethylketoxime) silane	0 – 5	See methylethylketoxime comments
7631-86-9	Silica, amorphous	5 – 15	See comments OSHA TWA = 20 ppm (b), 80 mg/m ³ (c) NIOSH TWA = 6 mg/m ³ CANADA = 2mg/m ³ , 5(a)
1317-65-3	Calcium Carbonate (Limestone)	35 – 50	OSHA TWA = 15 mg/m ³ , 5(a) NIOSH TWA = 10 mg/m ³ , 5(a) ACGIH = 10 mg/m ³ (d) CANADA = 10 mg/m ³ , 5(a)

COMMENTS: a. OSHA, NIOSH, CANADA – Respirable mass; Total mass respectively. b. OSHA – PEL Table Z-3: Millions of particles per cubic foot of air. c. OSHA-PEL Table Z-3; 80 mg/m³. D. ACGIH – Inhalable (total) particulate matter containing no asbestos and < 1% crystalline silica. Under normal conditions use of no respirable silica particles should be released from this product. As a by-product of cure up to 4% methylethylketoxime (MEKO, CAS No. 96-29-7) is formed on contact with water or humid air. Provide adequate ventilation to control exposures within the following guidelines: Vendor guideline TWA: 3 ppm STEL: 10 ppm; AIHA WEEL TWA: 10 ppm.

SECTION 3 – HAZARDS IDENTIFICATION

Effects of Overexposure:

- Ingestion: Small amounts transferred to the mouth by fingers during use, etc., should not injure. Swallowing large amounts may injure slightly.
- Inhalation: Vapor overexposure may cause drowsiness, injure blood, liver and may irritate eyes, nose and throat.
- Skin Contact: A single short exposure (less than 24 hours) may irritate. Repeated prolonged contact (24 to 48 hours) may irritate moderately. Product contains oximes which are possible skin sensitizers.
- Eye Contact: Direct contact irritates slightly with redness and swelling.

Repeated Exposure Effects:

- Ingestion: Small amounts transferred to the mouth by fingers during use, etc., should not injure. Swallowing large amounts may injure slightly.
- Inhalation: Vapor overexposure may cause drowsiness, injure blood, liver and may irritate eyes, nose and throat.
- Skin Contact: Product contains oximes which are possible skin sensitizers.

Carcinogenicity: NTP Carcinogen = No; IARC Monographs = No; OSHA Regulated = No

Special Hazards: Sensitizers:

<u>CAS #</u>	<u>COMPONENT</u>	<u>WEIGHT %</u>	
22984-54-9	Methyl tris (methylethylketoxime) silane	<6	Possible skin sensitizer
2224-33-1	Vinyl tris (methylethylketoxime) silane	<5	Possible skin sensitizer

Comments: Methylethylketoxime (MEKO, CAS No. 96-29-7) 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 MEDO supplier to determine any relevance to humans. Until more data is known, exposure levels should be maintained as low as achievable.

This product contains polydimethylsiloxane (silicone) and when heated to temperatures above 302°F (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.

SECTION 4 – FIRST AID MEASURES

First Aid Procedures:

- Ingestion: Get medical attention.
- Skin Contact: 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.
- Eye Contact: Immediately flush with water for 15 minutes. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: Not applicable (solid)

Autoignition Temperature: Not determined

Flammable Limits in Air by Volume: Not determined

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.

Special 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. Use water spray to keep fire exposed containers cool.

Unusual Fire and Explosion Hazards: None

NFPA Code: HEALTH = 1 FLAMMABILITY = 1 REACTIVITY = 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Scrape up and contain for salvage or disposal. Avoid eye contact. Avoid breathing vapor. Keep container closed. Clean up 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.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures: Use with adequate ventilation. Product evolves methylethylketoxime (MEKO) when exposed to water or humid air. Provide adequate ventilation to control MEKO within exposure guidelines (see Section 3) or use respiratory protection. See product label for additional information. KEEP OUT OF THE REACH OF CHILDREN.

Storage Procedures: Keep container closed and store away from water or moisture.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Use self-contained breathing apparatus (SCBA) or other supplied-air respirator 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.

Ventilation: Local Exhaust: Recommended
Mechanical (General): Recommended

Protective Gloves: Use Silver Shield[®], 4h[®], butyl rubber, natural rubber, neoprene rubber or nitrile rubber.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION continued

Skin: Washing 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.

Eye Protection: Use proper protection – safety glasses as a minimum.

Work/Hygienic Practices: Eye washes and safety showers in the workplace are recommended.

Comments: Product evolves methylethylketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control MEKO within exposure guidelines (Section 3) or use respiratory protection. 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

Boiling Point: Not applicable

Specific Gravity @ 25°C (H₂O=1): 1.38

Vapor Pressure (mm Hg): Not applicable

Vapor Density (AIR=1): Not applicable

Solubility in Water: < 0.1

pH: Not applicable

Appearance and Odor: Grey or black silicone elastomer paste with mild oxime odor

Volatile Organic Compound (VOC): <5%

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: None

Incompatibility (materials to avoid): Oxidizing material can cause a reaction. Water, moisture or humid air causes curing and the liberation of methylethylketoxime vapors as described in Section 3.

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

Hazardous Polymerization: Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Long-term toxicological studies have not been conducted for this product. See Section 3 of this MSDS for acute symptoms of overexposure and carcinogenicity information.

SECTION 12 – ECOLOGICAL INFORMATION

Aquatic/Terrestrial Toxicity Environmental Fate No data is available at this time.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state and federal regulations. Before attempting clean up, refer to other sections of this MSDS for hazard caution information.

SECTION 14 – TRANSPORT INFORMATION

U.S. DOT

Shipping Description:	Non-hazardous Silicone Sealant
ID Number:	Not applicable
Hazard Class:	Not applicable
Packing Group:	Not applicable
Label:	Not applicable
Placards:	Not applicable

IMDG

Shipping Description:	Non-hazardous Silicone Sealant
ID Number:	Not applicable
Hazard Class:	Not applicable
Packing Group:	Not applicable
Label:	Not applicable
Markings:	Not applicable
Placards:	Not applicable

SECTION 15 – REGULATORY INFORMATION

TSCA Inventory: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory of chemical substances maintained by the U.S. Environmental Protection Agency.

SARA Extremely Hazardous Substances None

SARA Section 313 This product contains the following toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (SARA 313 – Toxic Chemical Release Reporting)

<u>Chemical Name</u>	<u>CAS#</u>	<u>Weight %</u>
None		

CERCLA/Superfund (RQ): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SECTION 15 – REGULATORY INFORMATION

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

SECTION 16 – OTHER INFORMATION

Document Date: 8/15/03

Supersedes: 11/30/01

Revisions: Section 1, Added C-999. Added Sections 11, 12 and 15

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