

MATERIAL SAFETY DATA SHEET

Section 1. Product and Company Information

MANUFACTURER: CERAM-KOTE COATINGS INCORPORATED
(Formerly Freecom, Inc.)
1800 Industrial Drive
Big Spring, Texas 79720

TELEPHONE: For information purposes 8:00 a.m. to 5:00 p.m. CDT
(432) 263-8497 (800) 346-4299

EMERGENCY: For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night



Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

DATE OF PREPARATION: December 12, 2011

SUPERSEDES MSDS DATED: January 6, 2011

PRODUCT NAME: CeRam-Thane 100

Section 2. Composition and Ingredient Information

| Chemical Name | CAS Number | Weight % |
|--------------------------------------|------------|----------|
| Water | 7732-18-5 | >50 |
| 1-methyl-2-pyrrolidinone | 872-50-4 | 1 - 5 |
| Tripropylene Glycol Monomethyl Ether | 25498-99-1 | 1 - 5 |

Section 3. Physical Data

| Description | CeRam-Thane 100 |
|---|-------------------------|
| Specific Gravity (kg/l) | 1.03 |
| Boiling Point | >100°C (>212°F) |
| Vapor Density (Air = 1) | of water vapor |
| Viscosity @ 78°F (25.6°C) in cP | 100 to 300 |
| pH | 8.0 |
| Vapor pressure [(mm Hg at 21°C (70°F)] | 18.52 |
| Melting Point | No Data |
| Molecular weight | Mixture |
| Weight per gallon | 8.6 lbs/gal (1,030 g/l) |
| Volatiles (% by wt) | 42 |
| Non-Volatiles | 58 |
| VOC content | 1.0 lb/gal (120 g/L) |

Section 4. Fire Fighting Measures

| Description | CeRam-Thane 100 |
|---|--|
| Flashpoint | >100°C (>212°F) |
| Flammable Limits | LFL: No Data UFL: No Data |
| Auto Ignition Temperature | No Data |
| Extinguishing Media | Ignition will give rise to a Class B fire. For dry polymer use water or carbon dioxide |
| Unusual Fire and Explosion Hazards | May generate toxic or irritating combustion products. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. May generate ammonia gas. When dried polymer burns, water (H ₂ O), Carbon Dioxide (CO ₂), Carbon Monoxide (CO) and smoke are produced. |
| Fire Fighting Instructions | Firefighters should wear butyl rubber boots, gloves, body suit and a self-contained breathing apparatus. |

Section 5. Reactivity Data

| Description | CeRam-Thane 100 |
|---|--|
| Stability | Stable at ambient temperatures. Coagulation may occur following freezing, thawing or boiling. |
| Incompatibility | Mineral acids (i.e., sulfuric, phosphoric, etc.). Alkalis (i.e., Sodium or Potassium Hydroxide, etc.). |
| Hazardous Decomposition Products | Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm). |
| Hazardous Polymerization | Will not occur. |

Section 6. Health and Safety

| Description | CeRam-Thane 100 |
|--|--|
| Primary Routes of Exposure | Eye, Skin, Ingestion, Inhalation |
| Potential Health Effects | <p>Acute (short term): Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. The effect is transient and has no known residual effect. Contact with eyes causes irritation, redness and discomfort which is transient. Contact with skin causes mild irritation and discomfort. Inhalation of mists and/or vapors may cause irritation in the respiratory tract. Coughing and chest pain may result. Product is absorbed through the skin and may cause nausea, headache and general discomfort.</p> <p>Chronic (long term): Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposures may result in adverse respiratory effects such as cough, tightness of chest or shortness of breath, adverse eye effects such as conjunctivitis or corneal damage. Effects from inhalation of vapors may be delayed. Repeated and/or prolonged exposure to low concentrations of vapor may cause sore throat and/or eye irritation which are transient.</p> |
| Medical Conditions Aggravated by Exposure | Asthma, Chronic respiratory disease (e.g. Bronchitis, Emphysema), Eye disease. |
| Carcinogens under OSHA, ACGIH, NTP, IARC, OTHER | This product contains no carcinogens in concentrations of 0.1 percent or greater. |

Section 7. First Aid Measures

| Description | CeRam-Thane 100 |
|---------------------|---|
| Eye contact | Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice. |
| Skin contact | Wash affected area with soap and water. Remove contaminated clothing and shoes. |
| Inhalation | Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Prevent aspiration of vomit. Turn victim's head to the side. Seek medical advice. |
| Ingestion | If swallowed, call a physician immediately. Note to physicians: Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person. |

Section 8. Personal Protection

| Description | CeRam-Thane 100 |
|---------------------------------------|--|
| Respiratory Protection | Chemical Cartridge Respirator with face piece to protect against the organic vapor; Supplied air respirator with full face piece; Self-contained breathing apparatus in pressure demand mode under the following conditions: during repair and cleaning of equipment, during transfer or discharge of the product, sampling, spray applications, and emergency situations. |
| Dermal Protection | Rubber gloves. Long-sleeved clothing. |
| Eye Protection | Splash-proof eye goggles. In emergency situations, use eye goggles with a full face shield. |
| Work and Hygienic Practices | Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. |
| Personal Exposure Limits (PEL) | Personal Exposure Limits (PEL) for both TWA and STEL have not been established for the hazardous ingredients listed on this MSDS. |

Section 9. Transport Information

| Description | CeRam-Thane 100 |
|-----------------------------------|---|
| DOT Non-bulk Shipping Name | Chemicals, N.O.I. - Not DOT regulated / / Keep from Freezing |
| IMO Shipping Data | Chemicals, N.O.I. - Not IMO regulated / / Keep from Freezing |
| ICA/IATA Shipping Data | Chemicals, N.O.I. - Not IATA regulated / / Keep from Freezing |

Section 10. Spills, Leaks and Disposal

| Description | CeRam-Thane 100 |
|--|---|
| Containment Techniques(Removal of ignition sources, diking, etc.) | Stop the leak, if possible. Ventilate the space involved. Reduce vapor spreading with a water spray. Shut off or remove all ignition sources. Construct a dike to prevent spreading. |
| Clean-up Procedures | If recovery is not feasible, add mix with dry soil, sand or non-reactive absorbent (Sodium Bisulfate) and place in a container or dumpster pending disposal. Transfer to containers by suction, preparatory or later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Wash contaminated property (e.g., automobiles) quickly before the material dries. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck. |
| Other Emergency Advice | Open enclosed spaces to outside atmosphere. Spilled polymer emulsion is very slippery. Use care to avoid falls. A film will form on drying. Remove saturated clothing and wash contacted skin area with soap and water. Wear protective clothing, boots, gloves, and eye protection. |
| Waste Disposal | Comply with all Federal, State and Local regulations. For small quantities (less than 100 gallons): Disposal to municipal or industrial wastewater treatment plants is normally acceptable. Obtain approval from these authorities before disposal. The product may cause foaming when agitated. The product can be chemically or biologically degraded. For large quantities: Disposal through licensed waste disposal facilities is suggested. The product can be incinerated, though chemical or biological treatment is sufficient. Chemical precipitation/coagulation can be used to facilitate removal of solids (consult manufacturer for detailed procedure). NOTE: As supplied or diluted, product material (foam included) when splashed on automobiles or other personal property, is difficult to remove if allowed to dry. |

Section 11. Handling and Storage

| Description | CeRam-Thane 100 |
|--------------------------|--|
| Storage | Keep away from: acids, oxidizers. Keep in cool, dry, ventilated storage and in closed containers. Avoid freezing temperatures during storage. Minimize contact with atmospheric air to prevent inoculation with microorganisms. If headspace ventilation is required, use air to reduce skin formation on emulsion surface. Do not store in iron or other reactive metal containers. |
| Handling | Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid using in any spray application without strict conformance to all applicable electrical codes and the OSHA limit for maximum allowable airborne concentrations. |
| Other Precautions | Emergency showers and eye stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g., OSHA). |

Section 12. Toxicological Properties

| Description | CeRam-Thane 100 |
|---|--|
| Acute Oral Toxicity (LD50, Rat) | No Data |
| Acute Dermal Toxicity (LD50, Rabbit) | No Data |
| Acute Inhalation (LC50, Rat) | No Data |
| Other Acute Effects | No Data |
| Irritation Effects Data | Projecting respiratory irritation due to mild skin irritation. |
| Chronic/Subchronic Data | No delayed, subchronic or chronic test data are known. The product does not cause sensitization. |

Section 13. Regulatory Information

| Description | CeRam-Thane 100 |
|--|---|
| US Federal Regulations | |
| Toxic Substance Control Act (TSCA) | All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory |
| OSHA | Hazard Communication Standard (29CFR1910.1200) hazard class(es) irritant. |
| EPA SARA Title III | Section 312 (40CFR370) hazard class Immediate Health Hazard |
| State Regulations | |
| <ul style="list-style-type: none">Proposition 65 Substances (Component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986") | None |