

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

SUPERCEDES MSDS DATED: August 1, 2011

PRODUCT NAME: CeRam-Kote 99P

Section 2. Composition and Ingredient Information

Common Name	Chemical Name	CAS Number	Weight %
PART-A CeRam-Kote 99P (Base)			
Ceramic Filler	Ceramic Filler	1344-28-1 14807-96-6	15 to 25
*Proprietary #1	Epoxy Resin	25068-38-6	40 to 50
Aromatic 100	Naphtha	64742-95-6	3 to 7
PM Solvent	Propylene glycol monomethyl ether acetate	000108-65-6	4 to 8
PART-B CeRam-Kote 99P (Curing Agent)			
Benzyl Alcohol	Benzyl Alcohol	100-51-6	>25
Triethylenetetramine	Triethylenetetramine	112-24-3	<5

*The specific chemical identity of this ingredient is declared proprietary information under 29 CFR 1910.1200, section (i) Trade Secret. Hazard Information is provided in this MSDS for this ingredient.

Section 3. Physical Data

Description	CeRam-Kote 99P (Catalyzed)	PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Specific Gravity (kg/l)	1.23	1.41	1.02
Boiling Point	N/A	241°F (116°C)	>200°C
Vapor Density (Air = 1)	> Air	3.2	No Data
Solubility in Water	N/A	Insoluble	<1.00%
Viscosity (centipoise)	900 to 1500 cP	1200 to 2000 cP	4,000 cP
pH	Slightly alkaline	Slightly acidic	No Data
Appearance and odor	Neutral Base is translucent, aromatic odor	Neutral Base is translucent, aromatic odor	Colorless and Ammonical
Density – packaged (on average per gallon kit)	11.0 lbs (5.0 kg.)	8.0 lbs (3.6 kg.)	3.0 lb. (1.4 kg)
Total Volatiles	10%	15%	Nil
Non-Volatiles	90%	85%	100%
VOC content	1.86 lbs/gal (221 g/l) less water	1.93 lbs/gal (232 g/l) less water	1.7 lbs/gal (204 g/l) less water

Section 4. Fire Fighting Measures

Description	CeRam-Kote 99P (catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Flashpoint	>200°F	>200°F
Flammable Limits	N/A	N/A
Auto Ignition Temperature	N/A	N/A
Extinguishing Media	Foam, CO ₂ , or dry chemical	Alcohol Foam, CO ₂ , or dry chemical. A water spray can also be used.
Unusual Fire and Explosion Hazards	Product is a NFPA Class 1B flammable liquid. Prevent smoking, open flame, static and other electrical sparking. Excessive heat may cause lids of containers to pop open from excessive vapor pressure.	May generate toxic or irritating combustion products. May generate carbon monoxide, toxic nitrogen oxide gases, ammonia gas. Sudden reaction may occur with oxidizing agents.
Fire Fighting Instructions	Treat as a flammable liquid type fire. In a sustained fire wear self-contained breathing apparatus and full protective bunker turnout gear	Wear butyl rubber boots, gloves and body suit and self-contained breathing apparatus.
Hazardous Combustion Products	Primary combustion products are carbon monoxide, carbon dioxide, and low molecular weight hydrocarbons. Other undetermined compounds could be released in small quantities.	Carbon monoxide, carbon dioxide, and nitrogen oxides

Section 5. Reactivity Data

Description	CeRam-Kote 99P(catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Stability	Avoid High Heat	Stable
Incompatibility	Avoid organic peroxides and oxidizers	Mineral acids, Organic acids, Oxidizing agents, Reactive metals
Hazardous Decomposition Products	Various hydrocarbon fragments. See section 4 of MSDS for combustion products statement.	Carbon monoxide, carbon dioxide, ammonia, and nitrogen oxides
Hazardous Polymerization	May occur. Avoid excessive heat, contamination and prolonged storage above 70°F	Will not occur.

Section 6. Health and Safety

	CeRam-Kote 99P (catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Primary Routes of Exposure	Inhalation, skin, eye	Dermal
Potential Health Effects	<p>Acute (short term): This product if inhaled may cause nose, throat, and mucous membrane irritation and possible central nervous system effects including headaches, nausea, vomiting, dizziness, drowsiness, loss of coordination, impaired judgment, and general weakness. It may cause moderate irritation to the skin with dryness, cracking, and possible dermatitis with prolonged or repeated contact. Direct eye contact with this product may cause immediate irritation to the eyes with redness, burning, tearing and blurred vision. It may cause mouth, throat and gastrointestinal irritation, nausea, vomiting, and diarrhea if ingested. Aspiration of material into the lungs can cause chemical pneumonitis, which can be fatal.</p> <p>Chronic (long term): Prolonged or repeated skin contact may result in irritation, dermatitis marked by rough, dry cracking skin. Contact with the epoxy resin may cause sensitization.</p>	<p>Overexposure effects: Direct or prolonged skin or eye contact can cause skin and eye burns. Swallowing liquid can burn mouth and cause nausea, vomiting, diarrhea, abdominal pain and collapse. Can cause allergic skin and respiratory reactions after repetitive exposure. Animal studies on component (s) have shown effects on liver and fetus.</p>
Medical Conditions Aggravated by Exposure	Persons with a history of chronic respiratory disease, skin disease, or central nervous system disorders may be at increase risk for worsening their conditions from exposure to this product.	Persons with a history of allergic conditions may be at increased risk for worsening their conditions from exposure to this product.

Section 7. First Aid Measures

Description	CeRam-Kote 99P (catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Inhalation	Remove individual to fresh air. If breathing is difficult, administer oxygen and obtain medical aid.	Remove to fresh air. Give oxygen if breathing is difficult
Eyes	Flush with running water for at least 15 minutes. Seek medical attention	Immediately flush eyes with water for at least 15 minutes. Get immediate medical assistance.
Skin	Wash with flowing water. Remove contaminated clothing and launder before re-wearing. If irritation persists, seek medical attention	Promptly wash thoroughly with mild soap and water.
Ingestion	DO NOT induce vomiting. Seek medical attention.	Remove stomach content by induced vomiting by medical personnel. Seek medical attention.

Section 8. Exposure Controls and Personal Protection

INGREDIENT	OSHA PEL (8-HR TWA)	ACGIH TLV (8-HR TWA)
*Proprietary #1	None established	None established
PM Solvent	None established	None established
Aromatic 100	None established	None established
Ceramic Filler	None established	None established
Part B	None established	None established

Exposure controls

Personal Protection

Description	CeRam-Kote 99P(catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Engineering controls	General dilution ventilation and/or exhaust ventilation should be provided as necessary to maintain exposures below regulatory limits.	Good general mechanical ventilation is recommended. Local exhaust recommended.
Respiratory Protection	If irritation occurs, or if the TLV or PEL is exceeded, use a NIOSH/MSHA approved air purifying respirator with organic vapor cartridges or canisters, or supplied air respirators. Use respiratory protection in accordance with your company's respiratory program, local regulations or OSHA regulations under 29 CFR 1910.134.	Organic chemical cartridge respirator, if needed.
Dermal Protection	Loose fitting long sleeved shirt, long pants and chemical resistant gloves such as neoprene or natural rubber gloves.	Wear impervious rubber gloves
Eye Protection	Chemical protective goggles.	Splash-proof chemical goggles

Section 9. Spills, Leaks and Disposal

Description	CeRam-Kote 99P(catalyzed) and/or PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
Land Spill	Prevent material from entering sewers or waterways. Remove all sources of ignition (flames, hot surfaces, and electrical static or frictional sparks). Ventilate area. Absorb with inert materials (vermiculite or sand) and place in a closed container for disposal as solid waste. Wash area well with trisodium phosphate and water.	Avoid all personal contact. Take up with absorbent material. Shovel into closeable containers. Flush contaminated area with water.
Water Spill	Material is mostly insoluble. The material will sink. Notify local environmental, health and wildlife authorities, and water intake operators. Contain with booms and minimize spread on water. Disperse any remaining residue to reduce aquatic harm.	This product is miscible in water. That means it is totally dissolved when mixed with water. Due to this property, this is considered a marine pollutant; however, when mixed with part A, and after the product cures, it is totally inert.
Air Release	Spills of this material may release volatile organic compounds into the air. Spills should be cleaned or covered to prevent volatilization	This product reacts with air by absorbing the moisture out of the air. Take up with absorbent material. Shovel into closeable containers. Flush contaminated area with water.
Disposal Considerations	Characteristic hazardous waste (D001) due to ignitability	Not a hazardous waste under RCRA (40 CFR 261).

Section 10 Transport Information

Description	PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
DOT/IATA/IMDG Shipping Names	DOT Non-regulated	DOT Non-regulated
Hazard Class or Division	N/A	N/A
Secondary	N/A	N/A
UN Identification Number	N/A	N/A
Packing Group	N/A	N/A
Label(s) required	N/A	N/A
Quantity Limitations(Air only)		
Passenger Aircraft	N/A	N/A
Cargo Aircraft	N/A	N/A
Packing Instructions		
Passenger Aircraft	N/A	N/A
Cargo Aircraft	N/A	N/A

Section 11. Regulatory Information

Description	PART-A: CeRam-Kote 99P (Base)	PART-B: CeRam-Kote 99P (Curing Agent)
ERG Number	N/A	N/A
TSCA Status	Each ingredient is on the inventory	Chemical components listed on inventory
SARA Title III	N/A	N/A
Clean Air Act	N/A	N/A

U.S. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.